DOCUMENT RESUME

ED 214 229 EA 014 001

TITLE Supporting Innovations in Education: Preparing Administrators, Supervisors and Other Key Personnel. Report of a Technical Working Group Meeting (Seoul, South Korea, September 29-October 11, 1980).

INSTITUTION United Nations Educational, Scientific, and Cultural Organization, Bangkok (Thailand). Regional Office for Education in Asia and the Pacific.

PUB DATE 81

NOTE 94p.; Meeting organized as an activity of the Asian Programme of Educational Innovation for Development (APEID).

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS *Administrator Education; *Administrator Role; Administrators; *Developing Nations; Educational Administration; Educational Change; *Educational Development; *Educational Innovation; Elementary Secondary Education; Foreign Countries; Higher Education; *Management Development; Science Education; Supervisors; Technical Education

IDENTIFIERS Bangladesh; India; Indonesia; Japan; Malaysia; Nepal; Pakistan; Philippines; South Korea; Sri Lanka; Thailand

ABSTRACT

Eleven countries (Bangladesh, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines, South Korea, Sri Lanka, and Thailand) participated in a 1980 meeting on methods of training educational administrators and supervisors to be supportive of educational innovation. This report summarizes the proceedings of that meeting and the recommendations made for better training of key personnel regarding educational innovations. The first chapter of the report consists of presentations of the participants concerning innovations implemented or suggested for bringing about changes in teaching and learning in their countries, especially in science and technology education. The second chapter summarizes the current preparation of key educational personnel in each country, with special reference to new planning procedures. Chapter 3 looks at problems and issues related to the preparation of key administrative and supervisory personnel to support innovations in teaching and learning. Finally, recommendations for better preservice and inservice training of administrators are made, including national administrative institutes of education and advanced level workshops. (Author/JM)

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ASIAN PROGRAMME OF EDUCATIONAL INNOVATION FOR DEVELOPMENT **APEID**

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SUPPORTING INNOVATIONS IN EDUCATION:

PREPARING ADMINISTRATORS, SUPERVISORS AND OTHER KEY PERSONNEL

Report of a Technical Working Group Meeting

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UNESCO REGIONAL OFFICE FOR EDUCATION IN ASIA AND THE PACIFIC
Bangkok, Thailand, 1981

APEID Technical Working Group Meeting on the Preparation of Key Personnel in Administrative and Supervisory Positions Responsible for Support to Innovations in Teaching and Learning Process, Seoul, 29 September-11 October 1980.

Supporting innovations in education: preparing administrators, supervisors and other key personnel; report. Bangkok, Unesco, 1981.

iii, 86 p. (Asian Programme of Educational Innovation for Development)

1. EDUCATIONAL ADMINISTRATORS - TRAINING - ASIA. 2. EDUCATIONAL PERSONNEL TRAINING - ASIA. 3. EDUCATIONAL INNOVATIONS - ASIA. 4. TEACHING METHODS - INNOVATIONS - ASIA. I. Unesco. Regional Office for Education in Asia and the Pacific, Bangkok. II. Title. III. Series.

370.71

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UNESCO REGIONAL OFFICE FOR EDUCATION IN ASIA AND THE PACIFIC
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Published by
Unesco Regional Office for Education in Asia and the Pacific
G.P.O. Box 1425
Bangkok, Thailand

Printed in Thailand

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BKA/81/OP/188-1000

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PREFACE

The Technical Working Group Meeting on the Preparation of Key Personnel in Administrative and Supervisory Positions Responsible for support to Innovations in Teaching and Learning Process, organized by the Asian Centre of Educational Innovation for Development (ACEID), Unesco Regional Office for Education in Asia and the Pacific in collaboration with the Korean National Commission for Unesco, was held in Seoul from 29 September to 11 October 1980. The main purpose of the Technical Working Group was to develop guidelines and strategies on the preparation of key personnel in administrative and supervisory positions responsible for support to innovation in the teaching and learning processes, and to assist the participating countries to consider the same according to their needs and requirements.

Objectives

The specific objectives of the Technical Working Group Meeting were to:

1. Explore alternative innovative approaches in bringing about changes in teaching and learning situations and processes in order to meet the development needs of each country, with special reference to committed administrative support for innovative curricula, methodologies, non-formal education programmes and new programmes in science and technology.

2. Review and analyse experiences related to the preparation of heads/principals of schools and teacher training colleges and supervisors for the improvement of teaching and learning processes, with reference to (i) new planning procedures; (ii) science and technology education for the coming years; and (iii) continuous building-up of administrative and supervisory capabilities.

3. Synthesize experiences of the Member States in the training of principals/heads of schools and teacher training colleges and supervisory staff, and the orientation of administrators, including exchange of views and during the above visits, with reference to (i) new planning procedures; (ii) introduction of science and technology education during the coming years; and (iii) continuous building-up and re-orientation of administrative and supervisory skills and capabilities.

There were 15 participants, one each from Bangladesh, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and RECSAM, and four from the Republic of Korea. The Unesco Regional Office for Education in Asia and the Pacific and ACEID were represented by the Specialist in New Methods in Teacher Education. The list of participants is given in Annex II.

Inauguration

The Technical Working Group Meeting was inaugurated by Mr. Jin Won Kim, Officer in charge, Korean National Commission for Unesco. In his welcome address, he traced the significant role played by Unesco, especially from 1973 onwards, when it launched the Asian Programme of Educational Innovation for Development which started meaningful processes of change in various areas of education. This programme not only extended educational capabilities but also attended to the vital improvement of quality of education.

Dealing with the key role played by educational administrators and supervisors in this change process, Mr. Kim highlighted the crucial need for organizing meaningful programmes of training for these personnel if educational programmes were to have the desired impact.

Calling for a joint effort to solve the issues facing the Asian Region, Mr. Kim felt confident that the high-level educators and administrators who had assembled at Seoul would be able to discuss the problems and to suggest guidelines for plicy makers in the Region.

Dr. H.K. Paik, Specialist in New Methods in Teacher Education, ACEID, welcomed the participants on behalf of Unesco, and thanked the Korean National Commission for Unesco for agreeing to host the Technical Working Group Meeting at Seoul. He explained in detail the objectives of the Meeting and emphasized the need for preparing key personnel in administrative and supervisory positions responsible for support to innovations in teaching and learning processes.

Dr. K. Venkatasubramanian (India), on behalf of the participants, thanked ACEID and the Korean National Commission for Unesco for arranging the Technical Working Group Meeting at that juncture when the Asian countries were at the crossroads in the field of education.

Election of officers

In the first plenary session, the participants elected Dr. Jong Chol Kim (Korea) as chairman and Dr. K. Venkatasubramanian (India) and Dr. Ekavidya Na Thalang (Thailand) as vice-chairmen. Mr. Chin Pin Seng (RECSAM) and Dr. Lourdes S. Sumagaysay (Philippines) were elected as Rapporteur General and Rapporteur respectively. Mrs. K.M. Malini Wijenayake (Sri Lanka) and Dr. Mohd. Yaacob bin Haji Mat Nong (Malaysia) served as members of the report drafting committee.

Organization and procedure

The activities of the Technical Working Group Meeting took place in five phases.

1. First, there were presentations of the various country reports relating to alternative structures and approaches in bringing about changes in teaching and learning processes. They were followed by discussions on the mechanisms and strategies leading to the approaches for bringing about these changes.

2. Second, the Meeting reviewed and analyzed the experiences relating to the preparation of heads/principals of schools and teacher training colleges, and supervisors for the improvement of teaching and learning.

3. Third, the Meeting undertook an in-depth discussion on the problems and issues relating to the preparation of key personnel in administrative and supervisory positions for carrying out educational innovations.

4. Fourth, the Meeting attempted a synthesis of the various issues connected with training programmes and the preparation of key personnel, so that an overview of their nature could be gained.

5. In the fifth phase, the participants were divided into two groups to discuss in detail: (i) the problems and issues in the preparation of key personnel; and (ii) the steps for the development of guidelines for the training of key personnel with reference to educational innovations.

During the meeting, visits were made to the following institutions: The Korean Educational Development Institute, Seoul; the Institute for the Study of Educational Administration, Seoul National University, Seoul; Demonstration Primary School, attached to Seoul Teacners College, Seoul; and Sin-il Junior and Senior High School, Seoul.

During the visits, the participants held discussions with the staff of the various institutions and had an opportunity to observe their activities.

The draft report was considered and approved by the meeting at the concluding session, with modifications which have been incorporated in the present version.

Chapter One

ALTERNATIVE STRUCTURES AND APPROACHES IN BRINGING ABOUT CHANGES IN TEACHING AND LEARNING

The decade that has just passed could be considered as the most active period of educational development in Asia. It witnessed an unprecedented quantitative expansion of education especially at the primary level in the Asian countries, in response to the political, social and economic demands of the people. Countries such as Japan and Malaysia have introduced nine years of schooling for every child. Countries, for example the Philippines, the Republic of Korea, Sri Lanka and Thailand have implemented free primary education. Others (for example Bangladesh, India, Indonesia and Pakistan) have been meeting the demands of parents for more and more places in primary schools for their children. Non-formal education programmes have been introduced in various countries of the region to cater to school drop-outs and others in the countryside, who, in many instances, outnumber those attending schools.

Education has been identified by every government in Asia as a foundation and a starting point for the development process. It is regarded as an instrument for cultural, social and economic change, and for a better quality of life in the face of rapid advances in science and technology.

Huge amounts of financial and other resources have been invested by governments to implement the dual policy of quantitative expansion of mass education and qualitative improvement of teaching and learning. Innovations in curriculum content, and the methodology of teaching/learning, especially in science and technology, have been developed and implemented.

Various countries concerned have achieved a good measure of success in terms of first-hand experiences in the innovative development of science and other subjects at primary and secondary levels. After more than a decade of involvement in the process of curriculum innovations, these countries have become aware of the problems and difficulties at macro and micro levels in their present stages of development and implementation of their new curricula. They are all preparing themselves to meet these challenges.

It has been recognized that the extent of success in educational development depends on the capabilities of the education administrative system to execute, co-operate in, and support the developmental and implementation phases of innovations. The preparation of administrative, supervisory and other key personnel to promote, co-ordinate and support

educational innovations is therefore critical for classroom teachers to carry out effectively the new teaching/learning process.

Studies and research have been carried out by various institutions especially in Asia to examine the existing constraints of the system on the organizational and administrative leadership, the supervisory and servicing support, and the school and classroom management, which are involved in all stages of the process of educational innovations. As a result, various alternative structures and strategies for all levels of personnel have been adopted or are being adopted or are proposed to be adopted to remove these constraints in order to further facilitate the implementation of curriculum innovations so that the population could receive more and better education.

It was agreed to summarize the alternative structures and approaches for administrative and supervisory support for educational innovations in the participating countries as follows:

Bangladesh

Alternative structures and approaches in bringing about changes in teaching and learning process:

1. Educational innovation in general context:
   a) Local Education Offices are being reorganized;
   b) New Directorates of Inspection, and of primary and basic (mass) education are to be established;
   c) In addition to existing formal schools, community schools are to be set up;
   d) A Curriculum Development Centre and a National Institute of Educational Administration and Management are planned for the next five year period;
   e) The restructuring of the examination system through the Boards of Intermediate and Secondary Education is under-way; and
   f) The Bangladesh Education Extension and Research Institute and the Academy for Fundamental Education are being strengthened.

2. Alternative approaches for educational innovation include the following:
   a) Decentralization of administration and supervision of education;
   b) Orientation courses for administrative and supervisory personnel;
   c) Introduction of universal primary education through systematic planning;

d) Curriculum-based distance teaching project using radio broadcasting to be started in the near future; and

e) Implementation of new curricula with emphasis on work experience.

3. New science and technology curricula:

a) General science is to be a compulsory subject for all students up to junior secondary level;

b) More emphasis is being given to training of science teachers; and

c) More attention is also being given to the development of science, vocational and technology education to meet manpower requirements of the country.

4. Approaches for new science and technology education:

a) Updating of science and technology education to make it more relevant to local needs; and

b) Orientation of science teaching to agricultural education.

5. Non-formal education programme:

a) Mass education is being carried out through the mass literacy campaign; and

b) Community schools will organize local craft-based income-generating activities for illiterate adults and school drop-outs.

6. Alternative strategies for non-formal education programme are as follows:

a) The use of work-oriented education for community schools;

b) The division of curricula into three categories - secondary level, community based and vocational programmes; and

c) Production-oriented non-formal education through self-reliant movement.

India

1. Alternative structures and approaches in bringing about changes in teaching and learning with reference to administrative and supervisory support:

Educational innovation in general context

The Ministry of Education laid down clearly its policy on innovations in its publication. "A Major Change in School Education" (1975), where

it is stated the goal is to make young men and women fit to face new challenges in life and to transform society and economy through innovations.

a) One of the major innovative programmes of the National Council for Educational Research and Training (NCERT) is the comprehensive access to Primary Education Project (CAPE), based on a flexible curriculum relevant to felt local needs. It envisages linking all teacher training institutes as planning and training centres specially to provide disadvantaged children 9 to 14 years of age with learning experiences.

b) The Project of Primary Education Curriculum Renewal is another major programme of NCERT, with special emphasis on the proper training of administrative and supervisory personnel to evolve relevant curriculum plans to reduce the rate of drop-outs.

c) NCERT encourages the setting up of committees of educational research and innovations by a funding programme.

d) The National Staff College for Educational Planners and Administrators attends to the training of key personnel.

e) The Technical Teachers Training Institute caters to the diverse training needs of teachers in the technical schools and polytechnics.

f) A great deal of training expertise in the field of agriculture is provided by the Indian Council of Agricultural Research and the various universities.

g) The State Council of Educational Research and Training (SCERT) of each state is responsible for curriculum development, in-service training, action-research in innovation and collection of baseline data. It is the 'think tank' of the State Education Department. One of the important outcomes of the SCERT's project is the successful preparation of 11,350 capsules of learning episodes in connection with CAPE Project, developed in co-operation with NCERT.

h) An innovative scheme known as college complexes, wherein colleges adopt secondary schools in their areas, and secondary schools in turn adopt primary schools operating in their neighbourhood exists in the State of Tamil Nadu.

2. <u>Alternative approaches for support of educational innovations include the following</u>:

a) Selection of innovative projects for special financial support by Educational Research and Innovation Committee (ERIC) of NCERT;

b) Adoption of distance-learning techniques, through correspondence and radio broadcasts;

c) Field visits as part of training programmes for all levels;

d) Use of multi-media techniques;

e) Adoption of value engineering techniques;

f) Use of baseline data for planning by each State Director of Education; and

g) Organization of curriculum development cells at the state level monitored by both NCERT and SCERT.

3. New science and technology curricula

a) Major in-service programmes have been launched for school principals, science teachers, supervisors, and other key administrative personnel;

b) Many states are equipping secondary schools with modern laboratories. The State of Tamil Nadu has provided every government higher secondary school with a modern laboratory and up-to-date science equipment.

c) Every state is encouraged to start an Educational Technology cell funded by the Union Ministry of Education.

d) SCERTS have Science Wings to promote innovations.

e) Special textbooks and teacher's guides have been published and issued.

4. Alternative approaches for support of new science and technology education include the following:

a) Emphasis on active pupil participation;

b) Setting-up of science museums in schools;

c) Provision of radio receivers to schools, (e.g. the State of Tamil Nadu has provided all its 30,000 primary schools with a radio set each);

d) On-the-job training for science teachers on a continuing basis;

e) Assessment of student performance in class as part of the year-end examination; and

f) Starting of continuing education centres for in-service education.

5. Non-formal education programmes

a) The Community Education Project (CEP) of NCERT developed special instructional materials in various vocational subjects for re-entry of the dropouts to education with meaningful innovative programmes. It is implemented by SCERTs in the States.

b) Special curriculum materials are prepared by the Resource Centres for non-formal education at the State level.

6. Approaches utilized for support of non-formal education include the following:

a) Full utilization of radio and T.V. media;

b) Emphasis on vocational skill in learning;

c) Use of special reading materials;

d) Learning based on learner's felt needs;

e) Use of multi-media approach; and

f) Making education through non-formal education comparable to that attained through the formal system.

Massive programmes of adult and non-formal education are launched throughout the nation with special reference to education of women.

Indonesia

1. Educational innovation in general context

a) The Office of Educational Research and Development (BP3K) of the Ministry of Education and Culture is responsible for educational research and curriculum development.

b) The Directorate of Primary Education and General Secondary Education, with the provincial and local education offices, is charged with the responsibility of implementing the new curriculum of 1975 and the new curriculum of vocational-technical education, 1976.

c) The Inspectorate, together with the provincial and local supervisors, assists in the implementation process.

d) The Directorate of Middle Level Vocational-Technical Education has responsibility for the modernization of vocational technical programmes and curricula.

e) The Mastery Learning Modular Project in all subjects for schools was one of the major innovative projects carried out.

f) Another important project on the improvement of primary teacher education was launched by the Directorate of Teacher Education.

g) The textbook project is an on-going project to publish the whole series of textbooks by the Ministry of Educations and Culture.

2. Alternative approaches adopted for support of educational innovations include the following:

   a) Holding of seminars, workshops, conferences;

   b) In-service training of management and supervisory personnel at all levels;

   c) Multi-institutional participation in curricula development;

   d) Publication of textbooks and teacher's guides; and

   e) Participation in UNESCO and UNICEF programmes.

3. New science and technology curricula:

   a) The National Science and Technology Centre in Bandung conducts in-service science training programmes for key personnel, and the National Mathematics Teaching Centre in Jogjakarta is responsible for similar programmes in mathematics.

   b) The Science Equipment Centre has the function of designing and producing proto-type equipment for science teaching especially for primary schools.

   c) The Advisory Board for Vocational-Technical Education was set up to improve the teaching of technology and vocational subjects.

   d) The development of vocational-technical guidance programmes was undertaken at the Technical Teachers Upgrading Centre (VTUC).

   e) The new science and mathematics curricula of 1975 and the new vocational-technical education curricula of 1976 have been implemented.

   f) The improvement of teaching of secondary science and mathematics - a four-year project - was launched in 1979.

   g) Regional Teaching Centres in science and mathematics are being set up in eleven regions under the direction of the two National Teaching Centres for in-service training purposes.

   h) A system of national trade examinations for evaluation of various skills is being developed.

4. Alternative approaches which are used for support of educational innovations include the following:

   a) Convening of workshops, seminars and conferences;

   b) In-service training and orientation for all management and supervisory personnel at all levels;

   c) Use of multi-level and multi-institutional participation in curriculum development and educational administration workshops;

d) Involvement of industry and business sectors (KADIN) in the development of more relevant vocational-technical training; and

e) Use of UNESCO, RECSAM and Colombo Plan Staff College for Science and Technician Education for staff development and training.

5. Non-formal education programmes:

Non-formal education is under the Directorate of Sports and Non-formal Education. The programmes undertaken include the following:

a) The Solo-Pamong project based on self-learning modular system for out-of-school children (primary level) has been extended to larger rural areas. The teacher is a manager and facilitator of learning rather than an instructor.

b) The work and study programme (KEJAR)* based on mutual assistance social system (primary level) in community education has also been extended.

c) Short vocational training courses are available for out-of-school youths and adults from other ministries, such as the Ministry of Manpower.

6. Alternative approaches for support of non-formal education include the following:

a) Use of multi-media approaches;

b) Development of instructorial materials and guides;

c) In-service training of personnel involved in management and supervisory roles;

d) Use of community personnel in various crafts and vocations;

e) Collaboration of various government agencies in carrying out the projects;

f) Use of non-formal methodology; and

g) Use of mass-media

Japan

1. Educational innovations in general context

The Ministry of Education, Science and Culture offers guidance, advice and assistance to Local Boards of Education and local educational personnel on curriculum standards, methods and techniques of instruction, counselling and school management through direct or indirect means of communication.

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* KEJAR means three things; one is the literal meaning of the work to catch up; second, the abbreviation of words bekerja (to work) and belajar (to learn).

a) The Section of Curriculum Specialists of the Ministry conducts research and study on the standards of curriculum for both elementary and secondary schools in subject areas assigned to the appropriate specialists and gives advice and assistance in curricula to the Prefectural Boards of Education.

b) The Supervisory Sections of Prefectural and Municipal Boards of Education give direct guidance and advice on curricula to elementary and lower secondary school principals and teachers, based on the central government policy for supervision.

c) Local Education Centres offer in-service training for teachers with the help of science supervisors, providing facilities for research or developing purposeful practical activities or some science teaching equipment based on the curricula. They also organize periodic meetings on current issues and future trends of science and technology education.

d) Various teacher organizations, such as the national associations for elementary school science, organize forums and meetings for similar activities.

e) The Ministry conducts annual central workshops, and intensive in-service training of principals, vice-principals, supervisors and experienced teachers in charge of middle management.

f) The Tsukuba Annex of the National Education Centre is specially equipped for workshops/seminars related to school administration, curriculum development theory and instructional methodology, etc.

g) The universities and voluntary education study groups of teachers also hold workshops and study meetings.

h) The Ministry give grants to prefectural boards of education and study groups for in-service training.

i) The Hyogo University of Education was established in 1980 for in-service training of primary and secondary school teachers at master's degree level. One course is in school education and the other in subject specialization. Each year only 300 teachers are admitted to the graduate courses based on an entrance examination. This is the latest innovation in the teacher training system in Japan.

J) New curricula supported by new textbooks produced by private publishers have been scheduled for full implementation in elementary schools, lower secondary and upper secondary schools in 1980, 1981 and 1982 respectively. Each school organizes its curricula based on the courses of study, taking into account the actual conditions of its local community, and the development and characteristics of pupils.

2. Alternative approaches adopted for educational innovations include the following:

   a) Organization of systematic in-service programmes for administrators, school principals, vice-principals, supervisors and experienced teachers at central, prefectural, municipal and institutional levels by the respective educational authorities, local education centres, and institutions;

   b) Convening of conferences, workshops, seminars and consultation meetings at various levels by the same agencies as in 2 a) above;

   c) Publication of teacher's guides, manuals and handouts by the Ministry as well as by local boards of education, local education centres and institutions;

   d) Research-based approach for organizing the above activities;

   e) Use of multi-media and mass media resources;

   f) Advisory and guidance services by central and local supervisors and curriculum specialists; and

   g) Special national meetings of supervisors and other key personnel annually for introducing the revised courses of studies for schools.

3. New science and technology curricula

   a) Curriculum specialists of the Ministry of Education, Science and Culture, develop new science curricula in close consultation and collaboration with expertise from universities, local science centres, teachers' colleges, schools, teacher organizations and research institutions.

   b) The Ministry of Education, Science and Culture conducts a national seminar once a year for supervisors, and key personnel of science centres for study of innovations in science education, and carrying out of relevant research.

   c) The National Institute of Educational Research (NIER), Tokyo established the Science Education Centre for conducting research in science education and for documentation and exchange of information on science education.

   d) A new course of science study known as 'Science I' is made compulsory for all upper secondary students. It provides integrated studies of science in order to help students to understand concepts, principles and laws of nature, as well as relationships between nature and human life through observations and experiments.

   e) The science textbooks produced by private publishers are subject to authorization by the Ministry of Education.

f) The Japan National Broadcasting Co. (NHK) broadcasts science and technology programmes on television, prepared by the Programme Council of NHK in accordance with the courses of study.

The elementary, lower secondary, upper secondary and technical classes are finding these programmes very useful. NHK also conducts seminars every year with the Teachers Association of Audio-visual Aids on new instructional methodologies and other educational issues related to elementary and secondary schooling.

g) Science supervisors of local education boards are mainly responsible for administrative instruction for key personnel in schools. Science supervisors of local education centres are responsible for in-service teacher training innovations in science education.

4. Alternative approaches adopted for the support of new science and technology education are:

a) Systematic study of innovations in science education by the Ministry, universities, teachers colleges, local education boards, local education centres, and voluntary study groups and organizations.

b) Intensive in-service and orientation programmes for all categories of administrative, supervisory and key personnel by some agencies as given in 4. a);

c) Holding of meetings, seminars, workshops, practicums, technical working groups, consultations by agencies as given in 4. a);

d) Use of radio and television media;

e) Publication of new courses of study, manuals, guidelines and resource materials by the Ministry and local education agencies;

f) Use of multi-media, multi-institutional expertise and multi-disciplinary techniques; and

g) Monitoring of implementation of new curricula through evaluation procedures.

5. Non-formal education programmes

Non-formal education takes the form of out-of-school education.

In accordance with the recommendations of the Social Education Council in 1971, sweeping reforms were carried out at the National Institute of Social Education, such as:

a) an increase of social education officers to take charge of social education at local levels, and the employment of qualified private volunteers as part-time teachers;

b) various types of community programmes to strengthen solidarity among citizens carried out through the use of elderly people who have valuable knowledge and experience to impart;

c) the use of mass media for out-of-school education;

d) improvement and extension of social education facilities, such as libraries, museums, female education centres, public/community halls, national youth centres and children's nature study centres.

In addition, steps have been taken, in accordance with the policy decision of the Ministry of Education, to provide to the general public the use of physical education and sports facilities at existing schools, to establish local sports clubs, gymnasiums, etc. and to appoint sports programme co-ordinators for popularization and promotion of physical education and sports.

6. Approaches used for the support of out-of-school education include the following:

a) Intensive training of social education officers, sports programme co-ordinators, and other administrative and supervisory personnel;

b) Use of non-formal methodology;

c) Use of mass media and multi-media resources; and

d) Services of senior citizens as organizers and instructors.

Malaysia

1. Education innovations in general context:

Formal education in Malaysia is the main concern of the Ministry of Education which has ten professional divisions, and eight general administrative divisions to directly or indirectly administer and supervise the implementation of its education programmes. The Ministry is staffed by two main categories of administrative personnel, the professionals from the Malaysian Education Service and the general administrators from the Malaysian Civil Service. As education is a federal responsibility, each state is served by its department of education which is responsible for implementation and execution of school education policies and programmes. District education officers are appointed to assist in local administration.

a) The Curriculum Development Centre (CDC) is responsible for research, development and evaluation of school curricula for both primary and secondary levels.

b) The Schools Division with state education departments is charged with the responsibility of implementing new curricula.

c) The Inspectorate Division together with state supervisors assist in the administration and supervision of the implementation process of curriculum innovations.

d) The Educational Media Services Division is mainly involved in producing innovative radio and television programmes for transmission to primary and secondary schools through the national radio and television network.

e) The Textbook Bureau is responsible for inspection and authorization of all school textbooks produced by Dewan Bahasa dan Pustaka and private publishers in accordance with the approved courses of study.

f) The Malaysian Education Staff Training Institute (MESTI), presently under the Teacher Training Division, will become a new division of the Ministry of Education as soon as its organizational and institutional capabilities are assessed. Its main function is to develop and conduct systematic in-service training in educational management, and leadership training for all categories of professional and administrative personnel. It is concerned with the development of training and modern management techniques which constitute an important element in the teaching and learning process. MESTI will play its part for the necessary training of professional managers, supervisors and evaluators to support, monitor and sustain the new educational developments in the decade of the eighties.

g) The Teachers' Resource Centres will be set up in various states in order to provide administrative and professional support for educational innovations.

h) National, regional and local in-service and orientation programmes in various forms are conducted regularly by the Schools Division, State Education Department, Teacher Training Division and other agencies, usually using expertise from among themselves as well as from universities and other institutions for all classes of administrators, supervisory and other personnel involved in the implementation of new curricula.

i) The new 3-year pre-service education programme for primary and lower secondary school teacher trainees will replace the existing 2-year course in 1981.

2. <u>Alternative approaches used for the support of educational innovations include the following</u>:

a) Use of research data to ascertain needs for training of personnel from high level administrators and supervisory personnel down to classroom managers;

b) Meetings, dialogues, brain storming, consultations, workshops, seminars, conferences at national, regional, local and school levels;

c) Multi-disciplinary and multi-institutional collaboration in various activities among universities, teachers' colleges, and divisions of the Ministry;

d) Use of modern planning ana management techniques in the Ministry, private sector and other governmental agencies;

e) Study of present and future trends and issues in education in the context of rapid national and international changes;

f) Use of self-instructional manuals, modules and distance learning, multi-media resources and case studies; and

g) Collaboration with international education agencies such as Unesco, UNICEF and SEAMEO in senior level staff development.

3. <u>New science and technology curricula</u>:

a) While the Curriculum Development Centre is concerned with the development of new science and mathematics curricula for academic and general schools, the Technical and Vocational Education Division of the Ministry of Education is responsible not only for the administration of all vocational and technical schools as well as the polytechnics, but also for the development of vocational/technical curricula.

b) The MARA Training Division under the Ministry of Public Enterprise also provides vocational training in crafts, machine shop practice, electrical/electronics, and other trade and agricultural training through its network of Vocational Training Institutes in various states.

c) Residential secondary science schools and MARA junior science colleges have been established to expand and consolidate science education to meet the scientific manpower needs of the country.

d) Over twenty vocational/technical schools and five polytechnics will be built under the next five-year plan. This has implications for more administrative and technical supervisory personnel to support the rapid expansion and development of vocational/technical education.

e) The Curriculum Development Centre, the Planning and Research Division, the Vocational and Technical Education Division, the Federal Inspectorate, the Schools Division, the Federal Examinations Syndicate, the Teacher Training Division, the Development and Supplies Division, the Finance and Accounts Division and MESTI will plan and develop together innovative programmes for science and technology curricula that will meet the requirements of skilled manpower as Malaysia prepares itself for intensive agricultural and industrial development under its Fourth Development Plan (1981-1985). This integrated approach to educational innovations is a new dimension in the development process.

f) Supply of equipment and educational hardware.

4. Approaches that are adopted for support of new science and technology education include the following:

a) Various approaches as given in paragraph 2 (a-d)

b) Use of integrated team approach

c) Educational television services

d) Repair and maintenance services for laboratory and vocational/technical workshop equipment

e) Development of instructional materials, teachers' guides, and resource materials

f) Development of institutional libraries

g) Participation in UNESCO and RECSAM staff development and training activities and programmes.

5. Non-formal education programmes

a) Apart from the Ministry of Education and the Public Enterprise Ministry, other ministries such as the Ministry of Labour and Manpower, the Ministry of Social Services, the Ministry of Culture, Youth and Sports and the National Unity Section of the Prime Minister's Department deal with different types of non-formal education. Programmes include literacy classes, skill training in different vocations and crafts, language classes, and sports and athletics. The Ministry of Agriculture conducts a large number of non-formal courses for rural people in animal husbandry, poultry farming and agricultural programmes relevant to local needs.

6. Alternative approaches used for the support of non-formal education

a) In-service training of administrators, supervisors and instructors at all levels in the form of workshops, meetings, consultation meetings, etc.

b) Development of instructional materials, manuals, handouts using non-formal education methodology.

c) Use of radio and television media and distance learning.

d) Use of modern management techniques.

Nepal

1. Educational innovations in general context:

a) The National Educational Committee is the highest body in education and is responsible for policy direction at the

national level. It is also the co-ordinating body between the Ministry of Education and Tribhuvan University.

b) The Ministry of Education is divided into four regional directorates with 75 district education offices for administration of primary and secondary schools, and provides short-term training for principals and supervisors.

c) The Institute of Education of the Tribhuvan University organizes in-service training for heads of schools and primary and secondary school supervisors.

d) Training programmes for educational administrators, headmasters and planners are also offered.

e) The Centre for Economic Development and Administration of Tribhuvan University, which offers courses in development administration, also offers training to educational administrators.

2. Alternative approaches used include the following:

a) Short-term in-service programmes;

b) Workshops and seminars; and

c) Scholarship programmes.

3. New science and technology curricula

a) The Academy of Science and Technology and the Institute of Science and Technology are responsible for the planning and development of new science and technology curricula.

b) The Institute of Education organizes the in-service training of science teachers.

c) Scholarship programmes in science education are available for able students.

4. Methodologies used for teaching/learning of new science curricula are based on:

a) The inquiry approach;

b) Use of local environment; and

c) Development of low-cost instructional materials and teaching aids and teachers' guides.

5. Non-formal education programmes:

a) Distance learning programmes through radio are provided for adults and others who are out of school.

b) Radio education programmes are offered to primary school teachers.

c) Mobile teams conduct some vocational programmes in various areas.

d) Extension programmes are organized for administrators and supervisors.

6. Approaches adopted for the development of non-formal education programmes include the following:

a) Orientation techniques;

b) Application of use of distance learning techniques;

c) Emphasis on vocational skills in learning; and

d) Use of non-formal methods of teaching.

Pakistan

1. Innovations in general context

The Education Departments in all the provinces of the country have been reorganized to have a greater impact than before. There are four administrative levels:

a) Provincial Education Department (Secretaries and Directorate);

b) Directorate at divisional level;

c) District administration level; and

d) Sub-divisional (Tehsil) administration level (basic unit of management)

The underlying idea is to provide educational management and more and more opportunities of supervision of classroom teaching and learning activities.

2. Approaches used in bringing about change include the following

a) Preparation of a separate job manual for each category of administrators and supervisors from each sub-division level upwards;

b) Use of workshops for initiation in new concepts and techniques of management at each stage of educational administration; and

c) Orientation of supervisors with the new concepts and content, and new teaching/learning methodology which contributes to their role as leaders in innovation.

3. New science and technology curricula:

   a) Development of curriculum is a federal responsibility. A change in curriculum is always followed by a reorientation of teachers and supervisors, especially in science and mathematics. Each province is responsible for the orientation, but the Curriculum Wing of the Federal Ministry of Education undertakes the orientation in science and mathematics teaching.

   b) For the supervision of science teaching, there is an assistant supervisor at each district and sub-division level. He is a trained science graduate with ten to fifteen years of teaching experience in science.

   c) The National Equipment Centre has been established to ensure the supply of standard equipment to the schools and institutions.

4. Some alternative approaches adopted are:

   a) Inquiry approach in the field of science teaching;

   b) In-service teacher training; and

   c) Development of textbooks, instructional materials and low-cost science equipment.

5. Non-formal education programmes:

   a) The Education Department in each province is responsible for running programmes of adult education; a special Directorate of Adult Education in Punjab has been established. Selected Centres conduct evening sessions.

   b) The Women's Division of the Federal Social Welfare Department, Girl Guides' Association and other social organizations organize adult education programmes.

   c) Programmes of Adult Functional Literacy are organized by Allama Iqbal Open University, Islamabad in collaboration with the Education Television Section of Pakistan T.V.

6. Alternative methodologies adopted are:

   a) Development of instructional materials;

   b) In-service training of teachers and supervisors;

   c) Creation of community centres for making use of educational T.V.; and

   d) Post-evaluation of educational T.V. courses.

Philippines

1. Educational innovations in general context:

   a) Institutional structures have been developed to meet the needs of training educational administrators and managers at the highest level. The Development Academy of the Philippines is an example of this. It trains career executive officers in administration, planning and management in the light of changes in the social milieu. The objective is to train those who could take leadership roles in meeting future problems. Since the trainees are at the highest level, the effects of the training permeate to the lower ranks of supervisors, principals and teachers.

      Teacher training colleges and universities also provide courses in modern management techniques and the management of innovations.

   b) A network of curriculum centres in different areas provides structures for bringing about changes in the curriculum. These centres deal with special subject matter - social studies, science, distributive arts, agricultural arts, language studies and practical arts. The centres have maximized the use of resources, such as experts and physical facilities. Their influence on curriculum change is crucial: they plan, implement and evaluate innovative curricula. These centres are involved in the nation-wide Textbook Production Project. They are linked with the 14 regional staff development centres, each of which has a group of development schools that try out innovative curriculum materials. Supervisors and administrators at these centres are continually trained and oriented to implement innovation.

   c) Structured programmes to upgrade leadership roles of key personnel have been undertaken by the Ministry of Education and Culture. It is felt that the training should permeate all levels in order to make the change understood by those concerned. Thus, for superintendents of schools, training is provided in institutional planning while assistant superintendents are made to undertake a one month training course before appointment. This course is called School Executive Development Programme (SEDP). The district supervisors undergo training in the School District Supervisors Development Programme. It is envisioned that those district supervisors already on the job should undergo training. The content of the training include, among other subjects, modern management techniques and current educational trends. At the principal and teacher level, the Junior Executive Training provides orientation in new thrusts in education.

d) Some programmes are structured as co-ordinated and co-operative activities of the Ministry of Education and Culture on the one hand, and of other ministries, on the other hand. This is true in such programme thrusts as health and nutrition, taxation education, population dynamics and agrarian reform, which are also programmes of other offices and ministries. In fact, many of the training programmes are co-sponsored by the Civil Services Commission, which controls and regulates all government appointments.

e) The Philippines, being a member of Unesco, plays a part in some of the international structures concerned with innovations. Key personnel are generally involved in the seminars, workshops and training programmes sponsored by them.

2. Alternative approaches adopted in bringing about change include the following:

a) Use of research as a tool to assess needs for training of personnel from the teacher upwards, and knowledge about innovations, etc.

b) Small group approach for planning, implementing and evaluating programmes at national, regional, division and school level, if necessary.

c) Meetings, dialogues, consultations, workshops, seminars, conferences and symposia.

d) Inclusion of values development and attitude change in the training content.

e) A study of future trends and issues in the light of national and global changes.

f) Multi-disciplinary and multi-institutional approaches-culture, government, industry, commerce, education and others.

g) Linkage within and outside the Ministry.

h) Linkage with international agencies, such as Unesco, APEID and SEAMEO.

3. New science and technology curricula:

a) For science and technology, there is a network of science centres headed by the University of the Philippines Science Education Centre (UPSEC), which is a university based centre for science and mathematics. The 14 regional staff development centres operate as linkages between UPSEC and the development schools. These schools are try-out centres for curriculum materials, and demonstration schools of those not included in the network. The UPSEC is outside the Ministry of Education and Culture, but co-ordinates with the total science programme.

b) Inter-institutional co-operation is also provided through the involvement of government agencies like the National Science Development Board. The success of innovations in science teaching demands largely upon the close co-ordination among agencies and the leadership of the UPSEC. This co-ordination even extends beyond the limits of the national context. The total science education project is co-ordinated and is co-operating with international organizations like RECSAM, INNOTECH, and Unesco/ACEID.

Supervisors and administrators are oriented to new science teaching before actual implementation is carried out.

4. Various approaches for the support of new science and technology include the following:

a) Research based approach used in developing personnel required, e.g. competencies of teachers and supervisors, such as those used in identifying training needs and effective training methods.

b) In-service training of administrative, supervisory and all other personnel at different levels.

c) Information dissemination through brochures and monographs published by UPSEC for planning of new science and technology education.

5. Non-formal education programmes

a) The Office of Non-formal Education was created by Presidential decree. Since its creation, non-formal education centres have been established in the regions to plan and implement programmes at the regional level.

b) Co-operative linkages with other government and non-governmental institutions undertaking non-formal education activities are established by the Office of Non-formal Education.

c) Curriculum structures involve such courses as functional literacy, productive skills, and development of good citizenship traits among out-of-school youth and adults.

6. Alternative approaches utilized in support of non-formal education programmes include the following:

a) Scholarships for identified leaders for productive work in non-formal education;

b) Use of newly qualified non-formal education co-ordinators for implementing programmes in the field;

c) Provision of government funds for equipment to provide productive skill training to out-of-school population and adults;

d) Use of in-service training for all categories of personnel involved at all levels;

e) Use of multi-media resources and mass media; and

f) Establishment of linkage with Unesco, ILO and other international agencies.

Republic of Korea

1. Educational innovation in general context:

The Ministry of Education was reorganized during the last decade in order to strengthen the executive and professional support to educational innovations in curriculum development, supervisory services down to classroom level, vocational/technical education, non-formal education, educational planning and management, and international understanding and co-operation.

a) The Bureau of Vocational and Technical Education was established to meet the urgent demands for vocational and technical manpower training required by the rapid industrialization of the country.

b) The Office of Supervisors and the Office of Planning and Management were expanded to provide support to the policy planning function in the Ministry of Education.

c) The Bureau of Textbook Compilation was set up with R and D functions in curriculum development.

d) Air and Correspondence High School programme was established in 1974, and attached to regular high schools.

e) A four-year teacher education programme will replace the present two-year course for primary school teachers in Seoul and Pusan from 1982.

f) Under the next five-year plan (1982-1986) compulsory schooling will be extended from the current six-year programme to nine years to include the middle school level.

g) The entrance examination system to higher education was reformed drastically in 1980 by a scheme adopting a combination of the high school report and a revision of the national qualifying examination, together with an increase in the enrolment quota for each university. The quality of university education is, however, to be maintained by forcing 30 per cent of the enrolment to drop-out, based on their performance in the university.

h) The Korean Educational Development Institute (KEDI), established as an autonomous institution in 1973, has been developed into a major curriculum development centre with functions to carry out basic research, educational policy studies, curriculum development and educational radio and T.V. programme production.

i) The National Institute of Education (NIE) of the Ministry of Education has been strengthened in its roles as the major in-service training centre for education in rural development, and the headquarters of educational research institutes in the cities/provinces.

j) The Korean Institute for Research in the Behavioural Science (KIRBS) and the Yonsei Educational Research Institute are playing significant roles in educational innovations, such as the mastery learning project and the educational development project respectively.

k) The Institute for the Study of Educational Administration, Seoul National University, is responsible for two kinds of programmes, one for leadership training for high level educational administrators, such as school principals, assistant principals, supervisors, specialists and researchers, and the other, a training programme of qualification of candidates for posts of school principals.

2. Alternative approaches used for bringing about changes include:

a) Education policy research;

b) Use of radio and television media;

c) Multi-institutional approach in development of curriculum materials;

d) Systematic in-service programmes;

e) Seminars, workshops and conferences;

f) Research and studies;

g) Use of base-line data;

h) Multi-media approaches;

i) Clustered-integrated high school system;

j) Use of demonstration and pilot schools;

k) Evaluation and try-out methodologies; and

l) Dissemination of information etc.

3. New science and technology curricula:

KEDI initiated in 1979 an extensive curriculum development project in science, vocational and technical education for both primary and secondary schools under the sponsorship of the Ministry of Education and the Ministry of Science and Technology. The members of various curriculum teams are from various faculties, institutes, teachers' colleges, schools and other government and private sectors. This project has been initiated in order to bring about innovations in textbook production, teaching methods and instructional materials, etc.

4. Various approaches used are:

   a) Self-study and self-learning techniques adopted to bring about changes in teaching and learning processes;

   b) Systems approach used to bring about changes in system;

   c) Use of multi-media resources;

   d) Distance learning techniques;

   e) Problem-solving approach adopted for educational innovation;

   f) Skill development programmes;

   g) In-service training programmes for all categories of administrative, supervisory and teaching personnel at local levels;

   h) Evaluation of new methods through try-out programmes; and

   i) Workshop and laboratory approach adopted for bringing about changes in teaching and learning processes.

5. Non-formal education programmes:

   a) The Ministry of Home Affairs initiates the Saemaul Movement for rural development and co-ordinates its programmes with various government and community agencies; and

   b) Major innovative programmes/projects under the Ministry of Education are:

      i) Saemaul Education in Agriculture High Schools;
      ii) Saemaul Education for industrial workers;
      iii) Air and Correspondence Education;
      iv) Social Education offered by universities and colleges;
      v) Vocational education programmes at vocational training institutions; and
      vi) Farmers' schools for leadership training.

6. Methodologies and approaches for support of non-formal education programme include the following:

   a) Use of non-formal methods in teaching and learning;

   b) Distance learning through correspondence;

   c) Multi-media approach;

   d) Self-study and self-learning techniques;

   e) Skill learning programmes and methodologies;

   f) Use of mass media; and

   g) In-service training for administrative, supervisory and other teaching personnel down to town and township levels.

Sri Lanka

1. Educational innovation in general context:

   a) Most educational innovations are monitored by the Curriculum Development Centre (CDC).

   b) Administrative and supervisory support is provided by the Centre with the help of the Circuit Education officers in various subjects in the various regions and the Regional In-service Co-ordinators. The Centre and the classroom teachers are linked together through the two groups.

   c) Selected seminar teachers from educational districts form regional teams, after training at the CDC to assist teachers in their region in implementing the innovative curricula.

   d) A network of Master Teachers/In-service Advisers has been established to conduct in-service training for teachers at the district level in various subjects, such as science, mathematics, social studies and technical subjects.

   e) The Staff College for Educational Administrators provides orientation programmes to administrators and supervisors from school principals upwards. Both residential and non-residential courses are conducted, usually by visiting staff specializing in specific fields.

2. Alternative approaches used in bringing about changes include the the following:

   a) Research and studies;
   b) Decentralization of in-service training;
   c) Workshops, seminars, conferences and courses;
   d) regional team approach;
   e) Use of multi-institutional expertise; and
   f) field visits.

3. New science and technology curricula:

   a) Non-traditional areas have been included in the Chemistry and Biology subjects of pre-university grades, consisting of sub-units on the resources of Sri Lanka, conservation, pollution, plant-based chemicals, pests and pest control, and inland fisheries.

   b) Under the Field Studies Centre Programme, a number of senior schools act as organizers to carry out certain nature study projects in their locality, for example, a river bank, as part of science learning.

   c) Conservation/energy project clubs have been set up in many senior secondary schools to carry out relevant activities within their school time table with the aim of developing a healthy attitude towards conservation of nature and energy resources.

4. Approaches adopted for support of new science and technology curricula include the following:

   a) Multi-media approach;

   b) In-service programmes for all categories of administrative, supervisory and teaching personnel from heads of school departments upwards;

   c) Development of instructional and resource materials and teachers' guides; and

   d) Seminars, workshops and conferences.

5. Non-formal education programmes:

The Division of Non-formal Education of the Ministry of Education is responsible for the development of non-fromal education.

   a) A school in a local area is selected for early school leavers to attend non-formal classes. These programmes are conducted by staff from the region, the community, and past school pupils of the area concerned. They are oriented towards bringing about attitudinal changes and giving skills for cottage industries.

   b) Non-formal education programmes for late school drop-outs are conducted by better qualified staff who work in collaboration with Rural Development and Social Services Staff. They are designed to train learners for junior level skilled employment.

6. Some approaches used for support of non-formal education programmes are as follows:

   a) Non-formal methods of teaching and learning;
   b) Multi-media approach;
   c) School learning practices;
   d) Self-learning approach; and
   e) In-service training of management personnel.

Thailand

1. Alternative structures and approaches in bringing about changes in teaching/learning with reference to administrative and supervisory personnel for innovation in general context:

   a) The administration of primary schools, under the Ministry of Interior, was handed over to the Ministry of Education in October 1980 with the main objective of achieving unity in policy directions and executive functions for both formal and non-formal education systems.

      The National Board on Primary Education, under the Chairmanship of the Minister of Education, will be set up, with the Secretary-General of the National Primary Education Office serving as its

secretary. Board members will consist of (i) Director-Generals of Teacher Training, Curriculum Development, Non-formal Education, etc., (ii) prominent persons interested in education and administration, and (iii) an equal number of representatives to (i) and (ii) combined from teachers in the province.

Provincial Boards of Education will be given the administrative authority for collective thinking and decision making responsive to local needs. Administrators, community leaders and representatives of teachers in the province will serve as board members.

b) A similar arrangement for the administration of secondary schools is underway in order to provide participatory involvement and decentralization of authority.

c) To diversify and harmonize teacher training with other functions, such as curriculum development and higher education, preparations have been made to conglomerate teachers colleges, agricultural colleges, technical colleges and physical education colleges into a form of consortium. It will be under the same policy guiding body for better co-ordination of training of college instructors in various fields of learning required by the newly diversified curriculum particularly for secondary schools.

d) A new private school grant-in-aid policy enacted in August 1980 shifted the emphasis to providing more governmental assistance for improving the quality of education and relaxed the control of school fees in accordance with the pressing economic situation.

e) The Academy for Educational Administrators was recently instituted to train high echelon asministrators in order to cope with the ever expanding task of educational development and effective implementation.

f) 'School Clusters' were organized at the district level in order to make educational innovations accessible to teachers and supervisors of both primary and secondary schools. The aim is to promote collective thinking and co-operative efforts among member schools. Leadership is to be related among themselves and promotion of 'quality' teaching/learning is strongly advocated. Budgetary provision is provided for the on-going activities of 'school clusters'. This movement is growing from strength to strength.

g) Implementation of new curricula at primary, lower secondary and upper secondary levels started in 1978 from its lowest grade at each level to the next higher grade year by year. The whole series of new curricula will be implemented by 1983.

h) A new system of school measurement and evaluation has been implemented also, in parallel with curriculum development. Its emphasis is on personnel development and progress of the learner as against severe competition with the peer group.

i) The 'Pioneer Schools' Project was set up, whereby primary and secondary schools were selected, on a voluntary basis, to operate as demonstration schools of 'school clusters'.

2. Alternative approaches adopted include the following:

a) Holding of seminars, workshops, consultation meetings, and conferences;

b) Comprehensive and relevant in-service training programmes for high level administrators, regional and provincial education officers, supervisors, teachers, college staff, school principals at both levels and 5,000 key teachers at 'school cluster' level;

c) Use of multi-institutional expertise in the development of instructional materials, manuals, in-service techniques and multi-media approach;

d) Use of diagnostic and standardized achievement tests as well as aptitude and interest tests;

e) Development of national assessment to ensure standard and quality of learning achievement;

f) Modification of university entrance examination to meet innovative curricula by the National University Bureau in close collaboration with the Ministry of Education; and

g) Guidance and counselling service for schools.

3. New science and technology curricula:

a) The Institute for the Promotion of Teaching Science and Technology (IPST), established in Bangkok about 10 years ago, has been responsible for the development of new science and mathematics curricula and proto-type equipment for primary and secondary schools, in collaboration with the Ministry of Education. It has also carried out in-service training of secondary science and mathematics teachers in phase with the implementation of new curricula.

b) Teachers Colleges now serve as regional in-service training centres as well as providing service in the repair and maintenance of science, mathematics and other teaching equipment.

They also participate in developing science and mathematics courses for vocational areas like agriculture, food science and home science, together with vocational and technical colleges.

c) Policy and directives on vocational/technical education are to be shifted to encourage participation of commerce and industries for more specific technical training.

d) Area vocational centres and polytechnical institutes will be expanded and re-equipped for intensive training of out-of-school people and secondary school students who wish to take up elective subjects of their choice and earn credits that are transferable to their schools.

e) A modular self-learning series in various science units has been developed.

4. Approaches adopted for the support of new science and technology curricula are similar to those used for support of innovations in general context mentioned in item 2 above. In addition, management and supervisory personnel are involved in project try-outs and evaluation.

5. Non-formal education programmes:

The Department of Non-formal Education was established by the Ministry of Education in 1979 to provide both co-ordinating and operating functions. It provides the following services to out-of-school youths and adults interested in furthering their education:

i) continuing (academic function) education;
ii) short vocational training courses;
iii) literacy attainment and retention; and
iv) information facilities and materials and other education services to village reading centres, community libraries and radio programmes.

Four Research and Development Centres were set up in the four geographical regions with a high degree of autonomy to make their non-formal education programmes relevant to the local needs.

6. Alternative approaches for the support of non-formal education programmes include:

a) Use of non-formal education approaches;

b) In-service training of administrative and supervisory personnel at all levels;

c) Development of instructional materials, teachers' guides and self-learning materials;

d) Use of mass media and multi-media approaches; and

e) Emphasis on vocational skill training.

Chapter Two

PREPARATION OF KEY PERSONNEL

This chapter will deal with the roles and responsibilities of administrators, their profiles in terms of the personality traits and skills required of them in the planning and implementation of innovations. Preparation of key personnel in the general context with special reference to the new planning procedures will be highlighted. Because of its importance and special bearing on diverse academic fields, the science and technology sector has also been specially taken up in this chapter. Plans for continuing build-up of administrative and supervisory capabilities have also been included. It was decided to use a common format detailing the steps for the preparation of key administrative and supervisory personnel in the participating countries.

Bangladesh

1. Roles and responsibilities of administrators and supervisors for supervisors for support of innovations

Existing service conditions require the administrators and supervisors (whether they are working in the professional or the administrative field) to implement innovations.

2. Profiles of supervisors and administrators including personality traits and skills

The supervisors and administrators have basic general education qualifications in addition to training in educational processes. But they need to develop in themselves professional competence both in respect to content and methodology of innovations. They must also be equipped with skills in management and human relations. Action is being taken along these lines in spite of various problems.

3. Training and preparation

a) Preparation in the general context

In Bangladesh ten teacher training colleges and 47 primary training institutes provide pre-service training for teachers, supervisors and administrators who may in the future be promoted from the teaching group. The Institute of Education and Research and the teacher training colleges offer the bachelor's and master's degrees in education, and the best of these degree holders are generally employed as supervisors and administrators.

For those already in service, the Bangladesh Education Extension and Research Institute at Dacca and the Academy for Fundamental Education in Mymensingh organize training courses. The Ministry of Education sometimes organizes meetings and conferences for education officers for important innovative projects.

b) Preparation in new planning procedures

New plans are generally prepared by the planning cell of the Ministry of Education. The field administrators, supervisors, inspectors and teachers are also involved in the process. After the plan is finished and agreed upon for implementation the field level administrators and teachers are generally given short orientation courses to appraise them of the technical know-how of implementing the plan.

c) Preparation for science and technology for coming years

There are no special supervisors for science and technology education programmes. The generalist inspectors who supervise all subjects also supervise science programmes. Professionals who have science degrees in their basic qualifications are allowed to take science subjects in education degree courses in the teacher training institutions. Occasional orientation courses are also organized for science supervisors and teachers in the Bangladesh Extension and Research Institute and the Academy for Fundamental Education.

d) Continuing build-up of administrative and supervisory capabilities

The existing arrangement of short course training and orientation is a continuing endeavour. In addition, possibilities may be explored as to whether or not a separate training institute may be established wherein supervisors, administrators and science teachers may be given through training.

India

1. Roles, responsibilities and profiles of administrators and supervisors for support of innovations

In India the administrator and the supervisor assume polyfunctional roles that are wide ranging, e.g. an agent of change, an executive who motivates people, an adviser on educational matters, an adjudicator, and an innovator himself. At the field level, he is also the interpreter of policies, a co-ordinator, and an extension worker.

The successful way in which the administrator was able to harness community efforts for Education in Tamil Nadu (formerly Madras State in India) in what is known as "School Improvement Conferences" is evidence to indicate the role of the administrator as a catalytic agent for school improvement, educational development and change.

The adult education programmes and non-formal education schemes in many states have the administrator as a catalyst to bring the people and the programme together.

2. Training and Preparation

a) Training Methods and Requirements in the general context

Much of the training is institutionalized. It is carried out in national organizations like the NCERT, the National Staff College of Educational Planners and Administrators, the state bodies like the SCERT's and the State Institutes of Education. The NCERT undertakes, aids, promotes and co-ordinates research and innovations in all branches of education. ERIC of NCERT initiates and sponsors research and innovative educational projects. It works in co-operation with educational research institutes and universities and provides necessary financial support for research. The National Staff College conducts seminars and conferences for district educational officers and professionals also in the management of educational projects. The Indian Council of Agricultural Research (ICAR) also assists in promoting and supporting innovations in the teaching-learning process of agricultural education. Planners and administrators in technical education as well as general education are also trained in the Technical Teacher Training Institutes in various States. The Teacher Training Colleges have extension centres for in-service education.

Grants-in-aid for research projects (GARP) are given to research investigators. Another incentive is the scheme of assistance for experimental projects to enable the teachers to conduct experiments in actual school situations.

Followships at the post-doctoral level, and publication of noteworthy theses also serve as incentive schemes. Incentive increments in salaries are given in several states if they take extra degrees.

Training methods are highly varied. Distance learning methods are used in order to cover people over a vast area. The correspondence-cum-contact courses in educational planning and management of innovations are usefully employed by the National Staff College. The SCERT Tamil Nadu (Madras) has launched correspondence and radio courses for primary school teachers in Madras, and this course which covers 5,000 teachers for a year is very popular.

Field visits lasting from four to five days provide the educational administrators and supervisors with the opportunity to observe at first-hand implementation processes and problems.

Special workshops, seminars and conferences have been organized exclusively for headmasters, teachers and supervisors to give them orientation in the proper implementation of innovative methodology.

Another innovation is the monitorial system where one diligent student in the vocational course in the higher secondary school is selected as monitor for 30 students. He is also given a small stipend. The scheme tried in Tamil Nadu gains meaningful involvement of the students in school administration.

For innovations, key personnel have been prepared through seminars and workshops all arranged by the SCERT (often under the guidance of NCERT).

Varied types of programmes are adopted at different levels by the SCERTS in all the states/provinces in India. At the Institute of Education, Maharastra, orientation programmes are held for administrative officers, extension officers, headmasters and supervisors. Deputy directors at the regional level are given orientation at discussion groups and periodical meetings. Education officers at the district level are also given orientation. Teacher educators, principals of teacher training colleges and institutes are prepared through in-service training courses. The Kerala state adopts radio courses successfully and all state SCERTs are involved in innovative programmes.

b) Preparation in new planning procedures

The Union Planning Commission in New Delhi monitors the state plans. Several states have started state planning bodies, wherein experts are assembled to undertake the planning exercises. Every Development Department has a planning and monitoring cell to prepare educational personnel.

Curriculum planning is done by NCERT, SCERT and various syllabus committees. The Boards of Education also look after these. The various Boards of Education (separate in many cases for secondary and higher secondary education) have especially constituted expert committees for curriculum planning, research on textbooks and examination reform.

Going down further, the District Planning Cells have Education Committees in many States, so that the people at grassroots level may also be involved in the planning processes. Regarding educational institutions too, the idea of institutional planning is emphasized. The administrator is asked to give special instructions to the teachers and head masters about institutional planning. Many schools and colleges have planning forums for student participation. Teachers and parents associations have their regular discussions, and they often co-operate fully in implementing a new curricular policy.

c) Preparation for science and technology

Great emphasis is placed in India on systematic science teaching. Educational technology cells have been started in every state and these cells, in addition to the Science Wings of the NCERT and SCERTs, closely monitor the science and technology schemes.

Building of full scale laboratories and organization of worthwhile science clubs in schools and special seminars and workshops for teachers and supervisors on educational technology have been given priority. The teacher training colleges and the departments of education of the universities play a major role in this sphere.

The Tamil Nadu State has started an innovative scheme of mobile laboratories to visit remote rural schools and this has created a new dimension in science teaching. A qualified teacher also travels in the mobile laboratory, and audio-visual techniques used in this connection are highly motivating.

d) Continuing build up of administrative and supervisory capabilities

India has realized clearly that if the administrator is to be successful and if he is to have an impact, he should be constantly oriented and reoriented. The famous saying of poet Tagore that "only a burning lamp can light another lamp" is true not only of the teacher but also of the administrator and supervisor.

e) Continuing education centres

If the administrative personnel are to be instruments of the change process leading to innovative education, they should be models of the process. The NCERT's project of launching Continuing Education Centres throughout the country has borne fruit. In the traditional arrangement of conducting workshops, seminars and training courses it would be revealing if a study is made on the expenditure pattern. Out of the total, more than 80 per cent would be spent on travelling and other allowances. To avoid this, the Continuing Education Centre concept was developed. By this arrangement the Centre which takes the services of top experts in a viable area caters to teachers and administrators within a territory. After this area is completed, the Centre can move on to another place. By this, not only would a greater number of persons be trained but greater impact is secured as the money is spent on real training and not on allowances.

The Tamil Nadu System of Training Master Educators at SCERT level with the help of the Regional Colleges of Education has also worked well. These Master Educators in their turn take up training in rural areas. This is also aimed at cost reduction, and increasing the impact and efficiency of the preparation.

Good schools are selected for implementing locally needed projects of innovation which are funded: The teachers and students are free to work on the project at their will, using all facilities available in the locality. This creates and sustains local interest and support.

The frequent use of audio-visual media and the supply of radio sets to the schools are aids to the implementation of the innovation. The close co-ordination between the administrator and parent-teacher associations helps to strengthen innovation.

Indonesia

1. Roles and responsibilities of administrators and supervisors for support of innovations

Administrators and supervisors interpret changes occuring in their own institutions; they lead the staff in working out the application of new ideas and methods which are appropriate to their own particular situation. They make formal arrangements for staff development like determining training requirements, resources to support new teaching methods, new skills required of the staff, and ways by which they can acquire these skills.

Administrators and supervisors co-ordinate the staff development programme so that each member acquires skills appropriate to his needs. To effect better change in people, he is responsible for providing a good organizational climate.

2. Profile of supervisors and administrators including personality traits and skills

In the efforts to promote innovations in both vocational and general education, the profile of the administrator and supervisor is that of a purveyor of knowledge in the twin areas of technology and administration.

3. Training and Preparation

a) Preparation in general context

Principals are usually trained in teacher training colleges (IKIP). Administrators for vocational education acquire training in technical colleges and staff colleges.

Supervisors are promoted from the ranks of senior technicians and principals. Thus, their experience on the job and preparation for these positions give them training for higher ranks.

b) Preparation in new planning procedures

The teacher training institutes prepare future supervisors and administrators in the theories of planning. While on the job, they also attend relevant workshops, seminars and conferences conducted by the Directorate. The Directorate of Primary Education conducts the workshops and conferences for primary school personnel.

New management techniques in programming and systems approach are dealt with in the training programmes.

c) Preparation for science and technology for coming years

The Science Centres and the Technical Teachers' Upgrading Centre (TTUC) train principals and supervisors in science and technology. In addition, there are many other forms of training like seminars and workshops. They are held at the provincial and local levels.

d) Continuing build up of administrative and supervisory capabilities

Several provinces have plans to continue building-up cadres of supervisory and administrative personnel through seminars, and workshops for academic up-grading in colleges and universities.

Japan

1. Role and responsibilities of administrators and supervisors for support of educational innovations

In the context of Japanese education, the administrator or supervisor should be a translator of the official curriculum, planned at the national level, into a practical curriculum that is actually used in schools. He is therefore both a curriculum maker and implementor at the same time. He is also an evaluator of the curriculum adopted in the schools. To be really effective, he has to perform these three functions equally well.

2. Profiles of supervisors and administrators including personality traits

In support of innovations, the administrator should have a broad knowledge of school administration, curriculum theory, modern instructional techniques, and school management. He should have the ability to advise teachers, organize school systems and, above all, he should have the skill of establishing good public relations.

3. Training and preparation

a) Preparation in the general context

The Prefectural (local) Education Centres have been offering in-service training for teachers. These centres organize periodic meetings to discuss problems of the present and the future, and exchange ideas on educational innovations.

The Teachers Association of Audio-visual Aids also prepares key personnel through seminars or meetings held once a year in co-operation with NHK. Basic educational issues and new instructional methodologies for elementary and secondary education are discussed at these meetings.

b) Preparation in new planning procedures

The officials of the Ministry of Education conduct seminars and workshops on planning in general. New procedures are discussed at such meetings. For curriculum planning, the Curriculum Council advises the Minister on new plans for the improvement of curricula at both the elementary and secondary levels.

c) Preparation for science and technology for the coming years

The prefectural or local education centres have been conducting in-service training on science curriculum and equipment production. The Ministry of Education also reinforces such areas like new science, the scientific way of thinking, and integrated approach to science curriculum. This programme involves both teachers and supervisors.

d) Continuing build-up of administrative and supervisory capabilities

Initiative is taken at the ministry level for the continuous build-up of key personnel. This is done through workshops at Tsukuba Education Centre. Various lectures are given for school administrators, covering concepts in curriculum theory, instructional methods, school management and organization of school systems.

Malaysia

1. Roles and responsibilities of administrators and supervisors for support of innovations

The roles of administrators and supervisors are reflected in the responsibilities described below:

Broadly, the responsibilities of administrators and supervisors for support of innovations are to:

a) be aware of the changing needs in socio-economic development as well as the political aspirations of the nation and their implications for education;

b) interpret policy decisions for the operational implementation of the educational system;

c) synthesize the operations of the educational system with the societal demands and expectation;

d) utilize baseline data for improving the operations of the educational system;

e) be able to operationalize the concepts of planned change;

f) demonstrate skills in qualitative and quantitative analysis of educational change, issues and problems;

g) have insight into the ramifications and processes of social engineering;

h) have competencies in programme development and project management directed towards improved resource administration for the qualitative improvement of education;

i) demonstrate leadership qualities and role effectiveness as heads of educational institutions; and

j) be sensitive to the role of administrative and supervisory position in promoting, supporting and co-ordinating innovations in teaching and learning processes.

2. Profiles of administrators and supervisors, personality traits and skills

As administrators and supervisors are found at different levels of the system's hierarchy and from different services - civil or education - there is bound to be differences in personality traits and skills. Their knowledge, skill and attitude toward supporting innovative programmes in teaching and learning may differ greatly, and these differences may affect the implementation of educational programmes. The administrators and supervisors may be grouped according to the following categories:

i) Educational planners, programmers and implementors;
ii) Heads and staff of educational institutions;
iii) General administrators; and
iv) Administrative support staff of the educational system.

The first category is found in the divisions of the ministry, state and district education departments, as well as the educational institutions, while the general administrators are found in selected divisions of the ministry, and the educational system's administrative support staff cut across all these divisions and departments. They provide support to the heads and staff of educational institutions to carry out programmes in schools or colleges. The heads and staff of educational institutions are largely responsible for planning, programming and implementing programmes with evaluative measures and teaching-learning outcomes as part of their professional skills.

Although at present educational operations are found to be workable and producing results, there is a need for a more systematic approach, and a wider participation and involvement on the part of planners, programmers, administrators, evaluators and researchers in formulating innovative programmes, for more effective and desirable teaching-learning outcomes.

3. Training and preparation

Key personnel who are in the administrative and supervisory positions possess academic qualifications ranging from at least nine years of schooling plus teaching credentials to a university degree plus a teaching diploma or advanced degree. In addition, some of these key personnel have also attended short in-service courses ranging from one week to six months in various fields, including administration and supervision. They are former teachers in primary or secondary schools trained in different subject areas, but not for administrative or supervisory positions. Their knowledge and skills in administration and supervision are the results of experiences while holding certain

responsible positions, such as heads of units or departments, senior assistants or vice-principals, administrative or supervisory posts in district, state education departments, and in the Ministry of Education. Some administrators or supervisors have attended in-service courses, for example, a Headmasters' course conducted during a school vacation, and a few have received training at advanced diploma level or post-graduate level. To most headmasters, administrators and supervisors, any knowledge or skills in administrative or supervisory positions come through on-the-job training rather than through a formal programme. There has been no systematic training arranged for them.

Within the teacher training curriculum, there is, however, a small component or topic on management and supervision, and this is also true in the case of the university's course for the diploma in education. But the topic is part of an integrated course at pre-service level. There is a possibility that emphasis on administration and management will be accommodated in the proposed three-year programme of teacher education and at first university degree level. Some of the key personnel have acquired advanced training in educational administration at post-graduate level.

Except for the professional or teaching certificates and diplomas, the general administrators from the civil service receive the same kind of education as the professionals. The National Institute of Public Administration (INTAN) has been set up to meet the training needs of general administrators across ministries, departments and other agencies, including the professionals in the Ministry of Education, state or district departments, or heads of schools and colleges. It has updated its programme to include several types of training addressed to diplomatic and civil service personnel in administration and supervision as well as in specialized areas. It also provides courses for the administrative support staff, especially the clerical services.

The setting up of the Malaysian Education Staff Training Institute (MESTI) is an answer to the need for a permanent institution of the Ministry of Education that could take care of the training of educational administrators and supervisors as well as the administrative and educational programme support staff within the ministry. It would address itself to the total training of key personnel involving administration and supervision. Thus general administrators and supervisors are also included in MESTI's programme, and it is best approached in conjunction with INTAN. MESTI has a clientele of approximately 50,000, calculated to include all those who would involve themselves in administrative and supervisory roles, including the administrative and educational programme support staff. MESTI would also collaborate with other agencies within and without the Ministry of Education, especially by sharing the resources in which each agency specializes.

MESTI is to direct its efforts to planning a comprehensive strategy for the in-service training of management and administrative

staff at all levels of the educational system. It concerns itself with the national goals of manpower development and national unity through human resource development to meet the objectives and programmes for the qualitative development of education.

MESTI is conceived as an open socio-technical sub-system of the total educational system. MESTI's technological effectiveness is being developed through the development of training content based on the selection and organization of funded knowledge and proven practices to meet the diverse needs of training. It incorporates an effective and efficient strategy for on-going assessment of training needs, and the specification of training requirements. It would also incorporate a repertoire of suitable training methodologies and techniques. The selection of training technology is seen within two modalities of training programmes, namely,

a) Serial training programme to be conducted in stages, for example, at the

   i) exposure or basic stage to enable personnel moving into new roles and areas of responsibilities acquire the basic competencies for their new jobs or new orientation;

   ii) intermediate stage to enable managers/administrators to function effectively and creatively; and

   iii) advance stage as a form of further professional and personal growth.

b) Discrete training programmes to meet specific needs of the educational service staff.

Within the two modalities of training, the training approaches include the following:

a) Residential training (full time), lasting from one to six months and using a variety of training techniques;

b) Practicum, principally as post-course follow-up; and

c) Distance teaching for on-the-job training. Distance teaching is being considered as a means to meet the following training needs:

   i) As a form of ad-hoc training when direct contact and face-to-face interaction with MESTI's trainers are judged to be not too critical;

   ii) As a means to sensitize and prepare trainees and also as a means to narrow the gaps in knowledge among trainees before full-time attendance at prescribed courses; and

   iii) As post-course (residential) follow-up to cater for continuing improvement of competence.

The following are examples of training techniques that may be adopted:

a) Seminar/workshop/retreat
b) Case studies
c) Field experience/internship
d) Lectures
e) Simulation and games
f) Training laboratory/clinic
g) Individual/group research/problem solving
h) Mini-courses: contact/self-instructional

The length of each training programme will depend on the nature and extent of the training needs and the anticipated time taken by trainees to reach the desirable level of competence. The objective is that trainees are provided with opportunities to reach efficiently the desirable levels of competence.

A model for training programme development to be adopted by MESTI encompasses the following sequence of activities:

a) Determination of training needs, both ad-hoc and on-going training needs assessment for career development and emerging educational management demands are pre-requisites to training programming. A corollary to needs assessment is the determination of norms of job performance requirements. Training needs assessment requires the collection and analysis of both subjective and objective data on performance tasks and performance expectancies.

b) The determination of training outcomes in terms of anticipated competencies related to job performance requirements.

c) Programme structuring, involving the selection, organization and sequencing of training content and experiences, the selection of training approaches and techniques.

d) Development of training materials for trainers and trainees and evaluation design and instruments.

e) Try-out of programme and formative evaluation with appropriate revisions.

f) Pilot testing to determine the problems of implementation.

g) Preparation for implementation

h) Implementation with evaluation of immediate training outcomes

i) Follow-up to training to enhance the application of competencies acquired.

j) Evaluation of long-range outcomes of training and subsequent training needs.

Flexibility in training programme schedules, with multiple entry points, and multiplicity of training techniques to meet individual differences should be the working principle of programme planning and implementation. The objective should be that trainees are provided with the opportunities to reach the desirable levels of competence efficiently.

The preparation of key personnel in administrative and supervisory positions by MESTI for the system's operations would ensure the support of administrators and supervisors especially for science and technology for coming years. In the Cabinet Committee Report, preparation for science and technology has been emphasized including the setting-up of a Task Force to look into the national needs in science and technology. The report has 173 recommendations in terms of implementing educational policy, and is being studied systematically for implementation.

The continuing build-up of administrative and supervisory capabilities has been recognized within the context of national development and the Conference on Departmental Training Needs, organized by the Public Services Department in conjunction with INTAN and attended by representatives of government agencies including MESTI and statutory bodies, demonstrated the need to upgrade training programmes as well as to set up new training institutions for the improvement of administrative and supervisory capabilities of each agency.

Nepal

1. Roles and responsibilities of administrators and supervisors for support of innovations

It has been accepted that the major function of educational administration is to provide the best possible programme of instruction. Since the administrators and supervisors are the ones who implement the policy and programmes, they must be fully oriented and trained to take up the task. The teachers who work at the grass roots always expect proper guidelines for action. Therefore the administrator should be in a position to present a proper model for the field worker.

2. Profiles of supervisors and administrators

The personality of the supervisors counts, and their attitude towards the field workers and their sense of commitment go a long way in achieving their goals. They should be ready to accept any suggestions and advice from the field workers. In other words, they should be implementor and evaluator at the same time. They should work as the co-ordinators between planners and the field workers also.

3. Training and preparation

a) Preparation in general context

Even a good plan or project cannot be properly implemented without committed administrators and supervisors in the field of innovation. Hence training programmes for educational administrators and supervisors gain priority.

The Institute of Education developed meaningful programmes for the training of educational administrators and supervisors. At present, the Institute of Education offers major courses in administration and supervision at Bachelor of Education level

and specialization in administration and supervision at Master of Education level. But this formal education system proved to be a slow process to cope with the growing demands, as the Institute of Education could offer this course only to a limited number of personnel. As a result, most of the educational administrators and superviosrs remained professionally untrained for a long time. Hence some short term courses were developed. A Centre for Educational Planning and Management was opened to conduct these courses under the Institute of Education. Secondary and primary school head-masters and supervisors are offered a three-month training-cum-workshop programme dealing with new trends and practices in education.

The Ministry of Education also organizes short term courses in addition. These in-service programmes are offered on a regional basis. The experts in different fields at the national level participate in the training. This training has proved to be very useful.

b) Preparation in new planning procedures

Top educational planners and policy makers are regularly sent abroad for higher training and education.

c) Preparation for science and technology in coming years

The trainees who want to be science teachers in primary schools are offered programmes for science education at the Institute of Education.

d) Continuous build-up of administrative and supervisory capabilities

Headmasters of high schools and primary schools,along with the supervisors, attend seminars, workshops and short term courses organized by the Institute of Education and the Ministry of Education.

Pakistan

1. Roles and responsibilities of administrators and supervisors for support of innovations

The administrators and supervisors under the new circumstances are expected to:

a) supervise the action of innovation in the field;

b) act as a model of innovation with regard to management skills and teaching methodologies;

c) help facilitate the development of base-line data for effective planning and development; and

d) project the qualities of leadership in relation to changing contexts and situations.

The administrator and supervisor has to discharge a two-fold responsibility:

a) The responsibility relating to management of educational innovation; and

b) The responsibility of professional acumen and leadership.

The ratio of these two types of responsibilities keeps on changing at all the three different levels of administration, i.e. the high level, the middle level and the field or grass roots level.

2. Profiles/personality traits/skills

a) Profiles

i) Readiness for adopting the innovation;
ii) Willingness to accept the demands of new situations;
iii) Capacity to act as leader of change;
iv) Capability of providing professional expertise in relation to innovation; and
v) Skill to affect the innovation.

b) Personality traits

i) Quickness in decision making;
ii) Skills of communication;
iii) Capability of generating action;
iv) Depth of vision in planning; and
v) Attitude of shared decision making.

c) Skills

i) Efficiency in managerial skills;
ii) Insight into classroom interaction i.e. skill to assess teacher/student interaction in actual teaching and learning situations;
iii) Required competence in planning for development; and
iv) Proficiency in professional skills, i.e. new concepts and approaches in teaching/learning methodologies.

3. Training and preparation

a) Training and preparation in general context

i) Most of the administrators/supervisors are graduates in education, and administration is a part of their usual pre-service training as teachers and administrators.

ii) In-service training in innovative concepts is imparted through the Bureau of Curriculum Development, Teachers Training Colleges/Schools, and Institutes of Educational Research.

iii) Courses in educational planning are offered by Allama Iqbal Open University, Islamabad, besides some

Institutes of Educational Research where courses are offered for the Master's Degree in Education.

iv) Special In-service Training Courses and orientation courses are held to provide new competencies of planning. Pilot project MUST (Management Unit for Study and Training) in NWFP provides in-service training to the administrators/supervisors in planning as a component of management skills.

b) Continuing build-up of administrative and supervisory capabilities.

i) Job manuals are prepared for guidance and reference;

ii) Continuing in-service training is offered for supervisory staff; and

iii) Build-up of information on supervision through special handouts is planned.

Philippines

1. Roles and responsibilities of administrators and supervisors for support of innovations

Several innovative projects have been identified in the Philippine educational system. Such projects are initiated at different levels, namely, national, regional or district levels. Thus, they are associated with a hierarchy of personnel who have differentiated roles and responsibilities.

Projects initiated at the national level are supported by administrators and supervisors who are responsible for planning, delineating objectives, setting up activities, monitoring and evaluation. They belong to national task forces who plan and carry out field trials as in curriculum change, and carefully evaluate their effectiveness before implementation at national level. They are leaders and are capable of creating a pool of personnel at both the regional and local levels who will finally implement the innovation in schools.

Administrators and supervisors at the regional level provide leadership within their jurisdiction, implement the plans for change, monitor and evaluate results and report these to the national task force.

Most important in a nationally implemented innovation programme are the district supervisors, the principals and the subject supervisors who implement the change in the schools. They assume the role of implementors at the school level and translate plans through indigenous resources.

For innovations initiated at all levels, the key personnel are public relations officers also and they inform the parents and the community about the changes in the school system. This is especially

true with an innovative project that drastically changed the roles of the teacher and used self-instructional materials instead of traditional structured classroom activities. Key personnel involved in innovative projects are also keen in closing communication gaps between planners and implementors.

They assume leadership roles by providing sustained interest in the implementation of innovations planned for schools within their jurisdiction.

2. Profiles of supervisors and administrators including personality traits and skills

Key personnel are equipped with basic professional competencies obtained through academic preparation and on-the-job training. In addition they develop particular skills to meet the challenge of change - like opposition from traditionally-oriented teachers or refusal of the community or parents to accept changes immediately.

Those working with national projects have acquired the ability to harness resources. In the planning process, they seek the involvement of people from the different disciplines and synthesize their ideas into a dialogue for solutions of problems that may come up in planning or implementation.

Key personnel who support innovations are skillful in communication, that is, they are able to translate plans in terms of operational activities that can be undertaken in schools. They are able to translate school programmes in the language understood by the parents and the community.

Generally, key personnel are able to relate their work with the tasks of others at the different levels. Those at the national level have the ability to see their functional relations with the groups or tasks forces on the lower levels. Those at the lower levels also relate their tasks to those at the upper levels.

Administrators and supervisors in support of innovations are skillful in monitoring and evaluating programmes. They are able to determine effective techniques of implementation and make use of these in future planning.

The need for sustained interest in work is crucial in implementing innovations. Thus, the key personnel should have the ability to sustain his interest in his work. By doing so he radiates enthusiasm that is needed for support of the innovation undertaken.

3. Training and preparation

a) Preparation in the general context

Preparation of administrators and supervisors is done at two levels: pre-service and in-service. Since these key personnel are professional educators they have under-graduate credits in

school administration and supervision. In addition, they have on-the-job experience in supervising or administering a school. This is so because most of them have been promoted from the ranks of principals and supervisors. Generally, while in service these key personnel attend seminars, workshops, meetings or conferences where general concepts of management and school administration are discussed. Initiative is taken mostly at the national, regional, division and/or school level.

Some institutions have been established to provide training at different levels. For general administration, the Development Academy of the Philippines has been conducting programmes for the highest level of educational personnel. Since this institution is a national one, it also trains government officials for other ministries.

Teacher training institutions also undertake programmes in management of short term duration. They also undertake programmes for those who wish to go onto graduate work in educational administration.

Regional education officials conduct training programmes in management, curriculum and other concerns of general nature. They prepare key personnel for the support of innovations.

At the ministry level two programmes, namely, school executive development programme and programme for school district supervisors, prepare key personnel for implementing innovative projects.

b) Preparation in new planning procedures

Key personnel trained in the general management procedures are also prepared to implement programmes using new planning techniques. At the national level the Office of Planning Service provides consultative service to offices within the Ministry. Regional planning units also seek the assistance of the Office of Planning Service in both short term and long term educational planning.

Since educational planning is embodied in the National Economic Plan, close co-ordination with the National Economic and Development Authority (NEDA) has been established. Thus conferences, meetings and workshops are held among education and NEDA personnel for the purpose of co-ordinated planning.

Key personnel at the division level also hold meetings to discuss division plans. This is also true of district level planning. Thus, the experience that the key personnel derive from their actual work prepares them for support of innovations.

The Junior Executive Training (JET) programme for middle level personnel provides topics in management and planning of projects. All principals and supervisors have been trained in JET, and thus they have some preparation along planning procedures.

c) Preparation in science and technology for the coming years

Preparation for science and technology is a co-operative undertaking by different bodies - the Ministry of Education and Culture, teacher training colleges and universities, private organizations and the National Science Development Board.

At the Ministry level, each region or division is provided with supervisors who have science as their specialization. They have been equipped with professional skills in pre-service academic work and in-service training programmes. Usually training is conducted by the Science Education Centre of the University of Philippines (UPSEC) through a network of regional staff development centres and its own institutional activities.

Several universities and colleges are involved in the development and training of science and technology key personnel. They conduct short term or long term seminars, workshops and courses sometimes in collaboration with the National Science Development Board or the professional organization of mathematics or science teachers.

International organizations like SEAMEO and Unesco also help in the training of key personnel for science and technology. Many of the supervisors have been trained at the Regional Education Centre for Science and Mathematics, a SEAMEO institution. After training, they provide leadership in implementing innovations in their own schools or districts. Unesco also conducts seminars and workshops at either the national or the regional level in the Philippines. They give the leaders the opportunity to be trained in new science and technology.

d) Continuing build-up of administrative and supervisory capabilities

Administrative and supervisory capabilities have been given top priority in education. Thus, there have been efforts at all levels through seminars, workshops, and conferences to up-grade key personnel. To avoid duplication, a special national committee has been set up to co-ordinate training programmes.

Co-operation among different sectors - universities, professional organizations, governmental and non-governmental agencies - in terms of training has been evident. The number of trained people could form a pool of personnel for support of innovations.

Republic of Korea

1. Roles and responsibilities of administrators and supervisors for support of innovations

In the context of Government initiated and guided development, the roles of government education officers become crucial and significant in determining and designing developmental projects. Very important roles and responsibilities are therefore assigned to administrators and supervisors for the support of educational innovations.

In most educational innovations, outside experts and professionals play significant roles at the planning stage. This is true for such stages as need-assessment and formulation of objectives.

In such areas, innovative ideas are discussed, and some of them are presented for consideration by the government for developing innovative projects and programmes. The government usually takes the responsibility for implementation of these programmes.

Even at the grass-roots level, such as in the school setting and the local board of education, administrators and supervisors take up roles as links between higher level decision-making and implementation organs at field level.

There are two groups of supervisors and administrators working at the Ministry of Education at Central government level and Local Board of Education at provincial level. These two groups can be interchanged within their professional qualification tracks. Therefore, supervisors can be transferred within the supervisory position. Generally, transfers between supervisory and administrative positions are restricted regulations.

2. Profiles of supervisors and administrators including personality traits and skills

Supervisors are qualified for positions such as: (1) high level supervisor at the Office of Supervisors and Bureau of Textbook Compilation in the Ministry of Education; and (2) supervisors in BOE and principals of elementary and secondary schools. Administrators have to pass the high-level civil service examinations to be employed in the government. Supervisors and educational researchers are usually selected from the competent teachers.

There has been general discussion about the relevant personality traits and required skills or competencies of supervisors and administrators.

3. Training and preparation

a) Preparation in the general context

In recent years, the training needs, either of the pre-service or in-service pattern, for administrators and supervisory positions have been greatly raised for efficient implementation of educational innovations. The tasks of developing and implementing educational innovations become complex since education interacts with many other factors.

The training of elementary school teachers for two years at teacher's colleges, and the training of secondary school teachers for four years at the College of Education, are, in fact, the major training programme for supervisors, because supervisors are recruited from competent teachers.

For administrators, there is no specially designed preparatory programme. Anyone who passes the government officials' recruitment examination is qualified to be an administrator.

There are many kinds of in-service training programmes for school teachers and supervisors. Some are for qualifying for vice-principalship and principalship, while others are general training for specific needs, such as new teaching methods. The junior teachers colleges and the College of Education provide in-service training. The Institute of Educational Administration attached to Seoul National University also provides special training programmes for principals and candidates for principalships.

The duration of training programmes varies from one week to six months, depending on the objectives of the programmes.

Administrators are usually provided with very general training programmes prepared by the Ministry of General Affairs.

b) Preparation in new planning procedures

Planning innovations in education is an important part of the five-year educational planning which has been considered to be integrated with overall socio-economic development planning in Korea.

In the planning process initiated by the Ministry of Education, administrators and supervisors are involved to a great extent. The best preparatory programme for these key personnel may be this kind of on-the-job training.

The Central Government Official Training Institute under the Ministry of General Affairs also provides in-service training programmes for key personnel focussing on general planning techniques, project management and evaluation.

The Korean Educational Development Institute (KEDI) has placed much weight on in-service training programmes as part of the implementation strategies for diffusion of innovations in education.

Recently, the need for specially designed training programmes for key personnel has been strongly appreciated by the Government. Thus, the development of a staff training college is under consideration. Plans are under way for instituting reforms at the Institute for Educational Administrators of Seoul National University as a special in-service training centre, either in the form of a staff training college or a Graduate School of Educational Administrators.

c) Preparation for science and technology for the coming years

Innovations in science and technology education have been directed to: (i) the reform of science and technology education; (ii) the establishment of new types of science high schools for the gifted; (iii) innovations in new teaching/learning materials; and (iv) teacher training for the innovations.

In order to make innovative programmes more effective, close working relationships among the administrators at the MOE, Research and Development Centres such as KEDI and the key personnel at the grassroots level were arranged such that: (i) KEDI provides necessary R and D functions to the administrators' training programme for key personnel; (ii) the Ministry of Education provides necessary administrative and financial arrangements; and (iii) the key personnel at the grassroots level are urged and directed to implement programmes specified by the MOE and KEDI.

d) Continuing build-up of administrative and supervisory capabilities

In Korea, continuing build-up of administrative and supervisory capabilities can be better achieved by reforms in personnel management practices and by improving the preparatory programmes for them. In this context, several reforms are under consideration by the Ministry of Education. They are: (i) changes in the government officials' recruitment examinations; (ii) providing necessary rules so that transfer is allowed only in cases where tasks required are within the same areas; (iii) recognition to be given to successful implementation of innovations; and (iv) the development of new pre-service and in-service training programmes. The experience of the Institute for the Study of Educational Administration, Seoul National University, may be utilized in establishing a professional training programme for educational administrators.

Sri Lanka

1. Roles and responsibilities of administrators and supervisors for support of innovations

In Sri Lanka, most educational innovation is monitored by the Curriculum Development Centre (CDC)and the Director of the CDC plays

a vital role in support of all innovations. He is also responsible for the proper implementation of such innovations.

2. Profiles of supervisors and administrators - personality traits and skills

In Sri Lanka, the profiles of these personnel depend on their status in the administrative structure. While those at the top of the hierarchy need not be greatly involved in the innovations at the implementation stage, those below have to be necessarily involved.

3. Training and preparation

a) Preparation in the general context

The Curriculum Development Centre serves as the chief training centre in connection with content and methodology of innovation. The training of administrators and supervisors is conducted by the Staff College for Educational Administrators.

In general, training is carried out through joint discussion sessions with policy planners, designers and those who are responsible for innovation.

b) Preparation in new planning procedures

For preparation in new planning procedures, too, joint discussion sessions are held with key personnel.

c) Preparation for science and technology for coming years and continuous build-up

The establishment of Regional Teams can be viewed as a way to train personnel to take up jobs in curriculum design and planning. They work in close collaboration with the CDC staff and in harmony and understanding of the various stages in the preparation of curriculum materials for schools, such as course guides for teachers.

Thailand

1. Roles and responsibilities of administrators and supervisors for support of innovations

In Thailand, when the National Scheme of Education (1977) was promulgated, administrators and supervisors at every level were obliged to support innovations advocated by the scheme. They were expected, however, to render their support in accordance with the responsibilities and roles designated to them. For example:

a) The Directors-General of the departments must see to it that the policy guidelines and the ideas of the National Scheme of Education are translated into appropriate plans - master plans, operational plans and budgets. They must execute the decisions, mobilize resources, co-ordinate the work of

related sectors, keep the morale of the working personnel high, solve problems that may come up and, at times, engage in public relations within and outside the scope of their work.

b) The regional and provincial eduation officers must see to it that the policy directives containing innovations are feasible and applicable to local situations. They also need to be chief co-ordinators in the implementation, especially in terms of men, money and materials. They need to assume several roles, namely those of problem identifiers and problem solvers, and also report to the higher authorities what is beyond their responsibility. Like the Director-General they must keep the morale of the working personnel high.

c) The school principals are indeed the most crucial key personnel for the actual implementation of innovative ideas undertaken in the schools. They need to be supervisors within their school and also maintain public relations with the parents and local people in matters relevant to school success or failure.

The rest of the key personnal assume varied roles and responsibilities according to the nature of their work.

2. Profiles of supervisors and administrators including personality traits and skills

The Directors-General of the departments are supposed to be very high calibre personnel who should combine in themselves a high degree of professional competence and administrative ability. They have to be good leaders with balanced judgment and well-rounded managerial skill and human relations skills. They are expected to withstand stresses and strains and keep up with the broad spectrum of ideas in the rapidly changing circumstances.

Other key administrators at the levels of division chiefs, secretaries of projects, directors of educational institutes and school principals have traits and skills more or less similar to those mentioned above. They have, however, a lesser degree or responsibilities, hence relatively lesser tensions probably.

The supervisors, the curriculum specialists, teacher educators and the master teachers of various subject areas, the test and measurement specialists, and the guidance counsellors are the key personnel who must have a high degree of competence in their fields. They are also expected to be able to work with people, particularly those at the grass-roots level like the classroom teachers. They should have a mind open to differences of ideas and opinions, yet have confidence in what they know. They should be able to apply their knowledge in accordance with varying situations.

3. Training and preparation

a) Preparation of key personnel in general context

Involvement and participation in various activities of planning, in meetings, and seminars indeed serve implicitly as very effective means of increasing a broader understanding among key personnel and upgrading their competence.

b) Preparation for science and technology for the coming years

Special training for teaching the new curriculum of science and technology has been organized every year by the Institute for the Promotion of Teaching Science and Technology (IPST) and its supporting agencies, namely, the teachers colleges and the supervisory units of the Department of Secondary Education and the Department of Vocational Education. The training is intended for the improvement of science and mathematics teaching at the secondary level.

c) Continuing build-up of administrative and supervisory capabilities

Recruitment and selection of more administrators and supervisors to undertake the rapidly expanded work as well as to replace those who retire are regularly carried out by every department concerned. Criteria have been developed for recruitment and selection, and intensive pre-appointment training programmes are organized every year. Besides, the establishment of the Academy of Educational Administration, now under negotiation as a World Bank loan assisted project, will, in the foreseeable future, greatly enhance the administrative and supervisory capabilities of key personnel.

Summary

The discussions presented by the participants have identified some very significant areas related to the roles, responsibilities and profiles of administrators and supervisors in support of innovations. Training and preparation in terms of the general context have revealed certain common and special problems and issues facing the countries. Adequate preparations have also been undertaken in several modes for new planning procedures, science and technology. Countries have also shown evidence of the continuous build-up of the key personnel in terms of their capabilities.

Generally, the supervisor or administrator assumes polyfunctional roles - adviser in education, planner, agent of change, and implementor. As a change agent, he is a communicator who translates the ideal into the practical ways capable of implementation in the field. He demonstrates sustained interest in the project and, most of all, he provides leadership that builds up the morale of those who work with him.

Supporting innovations in education

On the practical level, the administrator or supervisor is a problem identifier and solver, and also exemplifies effective ways of functioning.

To support innovations, the common underlying thread forming the profile, as advocated by every country, is that these key personnel should be competent in both the content of education and management; they should be skillful in human relations and be able to bring people of different ideas together for the solution of problems. They should be able to inform the community of the changes in the school system, and carry it along with them.

An analysis of the existing position reveals that a great majority of these key personnel come from a hierarchy of positions, and have varied responsibilities, some subordinate to others. Thus, their skills, abilities, and roles and responsibilities vary according to their ranks.

In most cases, training in the general context is uaually acquired in academic work before appointment. They take the form of academic credits in planning, management and educational administration given at teacher training institutions or university departments of education.

Some countries have established institutions that train educational personnel in short term or long term courses. A few of these institutions are government training academies that cater to government officials from various ministries.

Preparation for planning is also undertaken in the teacher training institutions or in universities. In most countries, however, there are within the Ministries of Education special planning units that conduct training programmes. The importance of on-the-job training in planning is also underscored, although it was realized that many of the planning skills are acquired through scholarships or special training in other countries or through assistance by international organizations.

Preparation in science and technology is undertaken through special curriculum centres, short term courses, seminars and workshops. In some cases, it is a part of general curriculum activity. In most cases no special personnel are given responsibility for the promotion of science and technology separately. In general, pre-service education is acquired in teacher training institutions through specialized courses, and there is a growing awareness among all the participating countries of the need to have proper training facilities for key personnel.

All member countries continue to build up administrative and supervisory capabilities through programmes of specific institutions, short term workshops, seminars and conferences. Some countries have plans for the continuing preparation of key personnel through the setting up of new institutions, reforms in existing ones, and co-ordinated in-service training programmes.

All country participants felt that even the civil service persons at top level administration in the field of education should have a professional orientation in education.

All country participants were of the unanimous view that given the government commitment accepting education as a major input for development, an innovative climate will be created for change and growth.

Every country participant wanted the image of administrators and supervisors to change for the better.

The profile of the new administrator - the new innovative agent of change - should be different from that of his predecessors. The rising generation of supervisors and administrators will not demand respect because of their status and position as their old counterparts, but would command regard and acceptance by their personnel example. They would believe in co-operation, and not direction. They would carry people along with them. They would have no sub-ordinates but only colleagues. No body will work under them, but every body will work with them. They would strive to create a new administrative order which will be different from the age-old hierarchy by adopting new modes of: (i) self management, (ii) self-design procedures; and (iii) self-renewal techniques. The new administrator would seek innovations born from the local environment and will not try to impose himself or his ideas through directives. In short, he will grow with the community as a precipitating agent of change, and help the community also to grow.

Chapter Three

PROBLEMS AND ISSUES

Considering the wide variety of problems and issues raised by delegates of participating countries, it seems quite difficult to separate issues from problem statements. However, the terms 'problems' and 'issues' can be used interchangeably within the context of preparation of key personnel in administrative and supervisory positions for support of educational innovations. A slight distinction as to their meanings and scope may be attempted here. Problems can be attributed to difficulties faced by the system itself in planning and programming activities smoothly according to a plan. They need to be overcome from time to time. On the other hand, issues are also problems but they are linked to policy and decision making. Issues need to be resolved for setting guidelines, goals and objectives for planners, programmers and implementors of a certain programme or activity.

There is also a need to define 'key personnel' within the context of problems and issues in their preparation for administrative and supervisory positions for educational innovations. By key personnel are meant:

i) multi-level position within the educational system; and
ii) personnel from the civil service and education service.

In regard to the first category, key personnel may be identified at different levels of the system's hierarchy, whether at policy making level or supervisory position at grassroots level. These key personnel are drawn from either the civil service or the education service, including teachers at professional level. There is a small percentage of personnel that come from other services, such as the accounting, financing and legal services.

Key personnel may be either catalysts to planned change or a conservative force that may hamper any change. They make important decisions in regard to innovations that need to be planned and implemented within the system. Their competencies in regard to knowledge and skills as administrators and supervisors have to be clearly defined. In addition to management skills, they need knowledge of areas such as policy-making and interpretation, issues and problems in education, programme and project development, research and evaluation techniques. They need to know and be competent at problem-solving, systematic planning and execution of tasks which facilitate development and social reconstruction and/or improvement. Their interest and motivation to carry out innovative programmes and activities are crucial.

The framework for training modalities, training approaches and techniques needs to be clearly outlined and formulated. Training effectiveness has to be the goal. Means and methods for improving performance have to be worked out. Whether training is carried out on a short or long-term basis, the collaboration between universities or educational institutions and the Ministry of Education as a central agency, as well as other interested parties, has to be worked out. Problems and issues that relate to collaborative efforts have to be identified. Both the theoretical and practical aspects of the training programme need to be emphasized.

Problems and issues which are categorized and described below may be useful for the member countries to develop guidelines for their training programmes. They are:

1. Acceptance of key personnel role in innovation

Definition of role of administrators and supervisors has to be very clear in order to ensure success of a project or programme. Resistance of the administrators and supervisors to the acceptance of the required role is bound to exist at all levels of the system, and from both the civil and education services because innovation means a departture from the role they are so much used to. There are gaps in their knowledge content and their resistance arises from these gaps. The training programmes should aim at narrowing the gaps as far as possible.

2. Communication problems and human relations

These are problem areas which cut across departments or divisions. They are problems within and outside the educational system. Society is becoming more demanding and critical as to what education could do in terms of social improvement and/or reconstruction and economic development. It would therefore be appropriate if the administrators and supervisors communicate and work closely with parents, teachers and the community for implementing innovative programmes. This involves a great deal of public relations work.

Within the system itself there should be a good management of information network on the basis of which policy decisions can be implemented at different levels. There should be sevaral sessions in the form of seminars, workshops and meetings where problems and issues encountered by each division or several divisions can be dealt with collectively.

3. Inadequacy of well-trained key personnel vs. rapidly expanding innovative projects

Within the system there is a shortage of well-trained personnel. The shortage can be attributed to: (a) loss of well-trained personnel to other agencies; (b) inadequacy of supporting staff to share work of a routine nature; and (c) excessive work load of well-trained staff resulting in less efficient work.

In order to keep pace with expanding innovative projects, it is necessary to develop a schedule of staff development and related training programmes. Competencies of key personnel for programme development have to be analyzed from time to time to ensure that training is given to key personnel.

4. Team building by integrating interdisciplinary and interdepartmental staffs

The problem here is to assemble a complete and competent team constituting administrators, supervisors, planners, programmers, curriculum specialists, teacher educators, subject specialists and evaluators, depending on needs from the very beginning of planning a programme or a project. There is also a need for close co-operation among all departments and personnel concerned. Because of the different orientations and backgrounds of members in a team, problems may arise in terms of differences in interpretation, and there is a need for establishing common ground for the team to work well. A common conceptual framework needs to be worked out at the planning stage and this framework should sustain itself until the implementation stage. Key personnel in the team should play important roles and understand the objectives of the team. The key issue here is to strive for achieving the objectives laid down.

5. Sustaining interest by incorporating viable monitoring and evaluative mechanisms

There is a need to incorporate a monitoring and evaluative mechanism so that differences and gaps that may be found in the team in terms of required knowledge and skills are corrected. The problem of understanding the mechanisms for monitoring and evaluating progress needs proper appreciation by all members so that they all know what the evaluation is all about.

6. Mobilizing innovative resources by allowing autonomy in meaningful creativity

Those outside the team should also appreciate and understand the use of a proper monitoring and evaluation system. Often directives are issued to follow certain guidelines without any flexibility. Such directives kill interest and hamper innovative ideas and innovative programmes. The problem here is how to make the controlling authority understand and pay more attention to what the persons at the grassroots levels are facing and are trying to do. The controlling authority should mobilize their resources in an innovative manner by giving them more responsibilities so that they feel that what they are doing is meaningful and satisfying.

7. Maximizing the use of resources to handle logistics problems and programme support services

If the projects that need to be launched are being formulated, problems in logistics and support personnel need to be resolved, if

possible at the pre-planning stage. Many a project is delayed because of logistics and support staff problems. Many times the key personnel do not fully recognize the availability of resources (talents, materials and otherpotentials including finances) because of certain attitudes or lack of knowledge or skills to utilize the available resources. Another problems is that certain key personnel themselves are not available or there is a shortage of resources. These are the tasks that administrators and supervisors should address themselves to.

8. Problems of feasibility study, data gathering and situational analysis

Many good ideas are not carried out or utilized because of lack of feasibility studies, data or information support. At the pre-planning stage innovative ideas should be related to real and practical situations so that necessary action can be taken. The necessary data and indicators of successes or failures should be available. Systematic planning and a methodical approach to the problem at hand will give the necessary assurance for a certain measure of success.

9. Theoretical or conceptual framework vs. practical or pragmatic approaches

There is a gap among key personnel in terms of possessing varying degrees of theoretical knowledge and using this theoretical framework for practical purposes. Either the key personnel are totally oriented towards conceptual thinking and the theoretical reality of the situation or they are too action-oriented without reflecting upon the action through conceptual understanding. These are the problems with the theoretician and the practitioner. How to bridge the two - theory and practice - for better results qualitatively is a continuing problem because of personal biases and value-orientation which are difficult to change unless appropriate training has been given in thinking conceptually and utilizing the theoretical framework to proper and practical application of the ideas conceptualized.

10. Cultural differences and value-systems

Reconciling the cultural differences and value-systems in meeting the national objectives and the reality of the changing world may warrant certain innovations. Some of these innovations are in conflict with traditional values, some others are irrelevant to developmental needs of the country because differences are not taken into account. In applying instructional technology to the teaching and learning situation, warmth and personal relationship can be of mutual benefit and thus better education may result. Many a foreign idea is unacceptable because it stresses too much on certain criteria which are irrelevant to the context of the society. The key issue here is how those ideas can be translated for a specific situation and relevant within the context of Asian societies. Thus value-systems and cultural differences

need to be understood thoroughly by key personnel at the pre-planning stage. Consideration should also be given to the differences in urban setting as compared to rural setting when a project or programme is formulated. Different meanings in communication and different value-systems exist among key personnel as well.

11. The lack of appropriate training in management of change and innovation

The focus here is on appropriate training for different levels of key personnel, and the training approaches and techniques which must be functional and which must facilitate understanding and acquisition of skills with a proper frame of mind accepting such training. The problem is that the trainers themselves may not understand or may not have the necessary technique to translate ideas into action. They need to know the proper steps in bringing about change and innovation. The psychological setting of those involved needs to be understood by the trainers or key personnel involved in a project. The key issue here is the lack of training opportunities for key personnel or poor quality found in the training programme. The training must be designed to attract key personnel and be related to the support of innovations.

12. Innovative ideas are hampered and obstructed by too many rules and regulations

Many a key personnel is a bureaucrat and sticks to rules thus avoiding innovations. The controlling authority may use rules and regulations to obstruct any innovative ideas thus hampering the entire project. Key personnel who have the authority to control should see that control is applied appropriately. The problem is that key personnel may refuse to interpret them for the benefit of the organization and of society.

13. A gap of knowledge between innovative key personnel and the people at large

Key personnel who implement innovative programmes without taking into account the responses of people and the community around would find themselves misunderstood. Many innovative ideas are not fruitful because this gap in communication and understanding is not bridged properly, and the public is not given the necessary orientation. Public relations and understanding of the community's expectations are crucial in carrying out projects with society's participation and involvement.

14. Lack of participation of the working people from grassroots level

Involvement of grassroots level key personnel, especially teachers and supervisors of innovative programmes is crucial. Teachers themselves should move closer towards the pupils' needs and should march along with the targeted group for successfully implementing innovations. Classroom teachers, subject teachers, young teachers and others

involved in such programmes must understand ideas from top-level key personnel so that those ideas are made practicable and meaningful to participants.

15. School principals' numerous responsibilities vs. time for innovative ideas

The complexity of tasks and functions, and the heavy responsibility that a principal must shoulder give practically no time for innovative ideas. He prefers to maintain the 'status quo' or the routine he is used to. A departure from the routine means a problem or inviting a complexity of problems which he may not be able to solve. He prefers to hang on to the old rules and regulations which may not warrant him from venturing outside his domain.

In the light of the problems and issues identifed above, key personnel in administrative and supervisory positions for innovations in teaching and learning processes need to be trained or retrained more appropriately at many levels.

For the successful implementation of any programme of innovation advance preparation and training of key personnel is necessary. Some guidelines for these will be offered in the next chapter.

Chapter Four

TRAINING OF KEY PERSONNEL - SOME SUGGESTIONS

Overview

As a reading of the preceding chapter might have indicated, there are quite a few issues and problems calling for the immediate attention of those concerned with the stupendous and somewhat hazardous task of innovation in education.

The first question might be: Why should one train the personnel? The success of an attempt at any innovation in education may depend on:

i) how the innovation is planned to be effected;
ii) how the action plan is organized;
iii) how the implementation is directed; and
iv) how the implementation is monitored or controlled.

Since all these factors contribute towards better management, it is imperative that all those who are in any way responsible for the management of the innovation are fully trained. This training will have to start from giving an awareness to these key personnel of the fact that a change is to be effected in the field. This awareness may constitute information about:

i) The nature of the innovation;
ii) The objectives of the innovation;
iii) The mode of the innovation; and
iv) The mechanics of the innovation.

Unless all those who are part of the system involve themselves in the innovation, the desired results will remain a dream unaccomplished. The irony of the situation in most of the cases, where the attempt at any innovation has failed to register results, has been this lack of awareness and involvement.

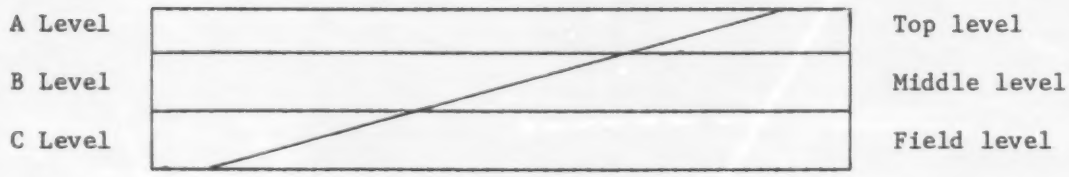
Issue involved

The main issue involved in this context seems to be the problem of identification of key personnel in relation to the innovation of education and the nature of this innovation.

Like any other department of public administration, the management of education has three main tiers or levels, with varying ratios of duties and responsibilities with regard to the administrative and professional pursuits or involvements.

The following diagram is an attempt to show the levels of educational administration and the degree of involvement in management and professionalism at various levels:

Administrative/supervisory skills



Professional/academic skills

Certain inferences may be drawn from this diagram:

a) The ratio of administrative and professional involvement or responsibilities interchange at level A and C.

b) The B level key personnel has an equal share of administrative and professional liabilities.

c) In any scheme of training, the preparation or orientation of the personnel at these various levels, must have the components of competencies according to the requirements of the level as regards the management and professional skills.

It is therefore a pre-requisite of any effective plan of such preparation that instead of a uniform instructional (cognitive or affective) package for all the different levels of administration, each level may be taken care of separately.

As far as the awareness and involvement in the process of innovation is concerned, the management of education is faced with yet another very serious situation. The innovation in education at one and the same time makes demands on:

a) The administrator;

b) The teacher (who has also the role of managing the implementation of innovation in the actual field of action i.e. the school); and

c) The public, who are going to be affected (benefited or otherwise) from the change through the change in the system.

The awareness and involvement of the remaining two sections, besides the administrator, is also to be kept in view while chalking out any action plan for the orientation in educational innovation.

The job of effecting an attitudinal change in the minds of the general public forms a part of the job requirements of the administrator. Public relations is, therefore, to be a competency component for the preparation of the key personnel who have to look after the implementation of an educational innovation.

The management of education has one peculiar side to it. The skills of the management of education and the area of competencies therein must include necessarily:

i) the role of the administrator/supervisor as the leader of innovation; and

ii) the provision of required competencies to the administrator with regard to the teaching skills, in the changed context of teaching/learning in live classroom situations.

The second field of competencies, especially relates to the B and C level management of education, and any programme of preparing B and C levels of management must include the provision of these competencies also.

After having gone through all these stages of prerequisites of key-personnel preparation for the administration and supervision of educational innovation, one should think of the stage of allocation of responsibilities for such preparation, before embarking upon the details of the structure or the components of such preparation.

Many experiences of the innovations attempted in the past lead us to believe that despite all the sincere and devoted endeavours, the innovation could not succeed or achieve the objectives or targets which it was proposed to achieve simply owing to the fact that either it could not register certain timely sanctions from the government quarters or became of the lacl of interest and preparedness of the key personnel to accept the innovation. It is therefore imperative that even before any attempt at the preparation of the key personnel is made, such measures as may ensure the success of the innovation be taken well before hand.

Government commitment

Governments must realize and appreciate the fact that education is a major input towards the development of any nation. The cost effectiveness of this investment in human capital may not be measureable in immediate financial terms but the change of attitude and the behaviour of the individual towards the national goals and objectives is the only guarantee of any development and this change can only be affected through education.

Being a powerful and effective agent of change, the attempt or the plans of innovation in the field of education, if successful, can bring about the change in socio-economic patterns of the country.

While deciding and fixing or arranging national priorities, countries of the region have to place education in its rightful position, if investments in other public sectors are to be purposeful. For example, it has been established by research studies that the fertility rates are low in highly literate people and vice versa.

Determination and re-arrangement of such priorities and the place of education in a new strucutre must be relfected in the budgetary allocations for different sectors.

Talking about the key personnel in education, the role or the importance of the teacher, who, in this context, is the field worker and the prime agent of change or innovation is not properly emphasized. People who are at the helm of affairs have to realize the importance attached to the role of a teacher, and while making selection or providing opportunities of orientation or training in changed teaching/learning a situations to the teacher, the facts that may facilitate the decision making are:

a) the teacher is the basic innovator; he must have the awareness and involvement in the process of change;

b) he works as a model of change for the students and he should be capable of justifying the role; and

c) without the change in the teacher no programme of change is successful.

Any plan of orientation/training of teachers must cover the competencies required for a teacher in this context.

It is also the commitment of the government to identify the key personnel, decide the importance of their participation and level thereof, and arrange to provide such competencies as are required. This identification has further specifications:

a) The placement of the right person in the right job, which means the purposeful mobilization of human resources.

b) The decision as to what level of key personnel needs what level of competencies with which components, i.e. administrative or professional, or both.

This identification will ensure that only those personnel have the key positions and the personnel having key positions are being given those competencies which contribute towards the total objectives of the innovation.

The provision of such competencies is in turn ensured through a properly planned, effectively organized and meaningful in-service orientation programme for all those key personnel who are involved in innovation. This orientation is not to be taken as routine but as a necessary instrument for the accomplishment of the major tasks of innovation. The competencies in such orientation are to be carefully designed and it should be the commitment of governments to ensure that innovation is preferably preceded by or at least keeps pace with such orientation.

Competencies required

The programmes for orientation and preparation of key personnel have to cover the following field of competencies if the preparation/ training of personnel and the innovation are to have the required impact:

a) Project management skills.

b) Professional competencies. The administrator/supervisor in educational innovation has to justify the role of the leader of that innovation, and since education has its instructional (teaching/learning) component, the competency in innovative methodology and the course content is an important pre-requisite for the preparation of key personnel to meet the challenge of change.

c) Planning competencies. Ability to manage the collection of statistical data, its arrangement and analysis on a scientific basis, and its interpretation for making the decisions together with making projections for future manpower resource requirements.

d) Ability to suggest and effect necessary changes in the existing rules and regulations to conform with the needs and context of change so that the administrator/supervisor may prove a catalytic agent of change.

Commitment of key personnel

All the measures and steps taken by governments may not prove meaningful and effective unless the key personnel, no matter what their level is, commit themselves to the cause of the innovation. The key personnel should therefore have:

a) An awareness and deep insight into the nature and objectives of the innovation.

b) A sense of involvement in the process of change - a personal sense of belonging is necessary.

c) A willingness to adapt to the innovation through learning.

d) A readiness to make a change of attitude suitable to the requirements of innovation/change.

e) A capability to act as a model of innovation with regard to his position in the innovative context.

f) A capacity to follow up the process of innovation and to monitor it together with its final evaluation.

Structure of training

In order to make the programme of key-personnel preparation effective, a purposeful mechanism or structure at national and other levels

has to be organized. This structure must begin with the opening of a National Administrative Institute of Education for training of administrators/supervisors of education in relation to the process of innovation. This institute will impart training to the personnel from the government-controlled and private institutions in co-ordination with the universities and other institutes of management.

Starting from this national body, a well designed and properly organized mechanism right down to the grass roots level is to be divised to cover the preparation at each level of administrators/ supervisors. At the national level, the National Institute of Training will guide and co-ordinate the entire training programme of the country keeping in view the demands of innovative processes, while the provincial/state/regional institutes should be autonomous in their functions with regard to the felt needs of the area. These provincial/state/regional institutes will guide and co-ordinate the training/orientation activities at district level and will look after the requirements of the implementation of the innovative training programmes as laid down by the Government. District Level Centres could also be thought of for training right down to the grass roots level.

If the suggestion of taking the mechanism down to district level may seem over ambitious, the functions and activities of the existing teachers training schools/institutes can be re-organized so as to meet the requirements of training/orientation under the new circumstances, provided there is a training institute in every district.

The scheme of instituting resource centres and mobile training units at district and grass roots levels can also contribute towards achieving the objectives of the innovation.

The following diagram may elucidate/illustrate the structure of training institutes further. (the Diagram is on page 71)

APEID advanced-level workshop model for preparation of key administrators and supervisors

The usual pattern of training in the various institutes will necessarily be a slow process. If innovations are to succeed, the administrator has to take timely decision. To make top policy makers aware of innovations and inculcate in them the much needed commitment, it will be useful to involve them in advanced level workshops* where concepts, design, development, administration and professional support to innovations could be discussed. Such workshops are suited for achieving immediate take-off in launching innovation, because in them, all important decision concerning innovations are arrived at through self-disquisis, self-study and self-analysis.

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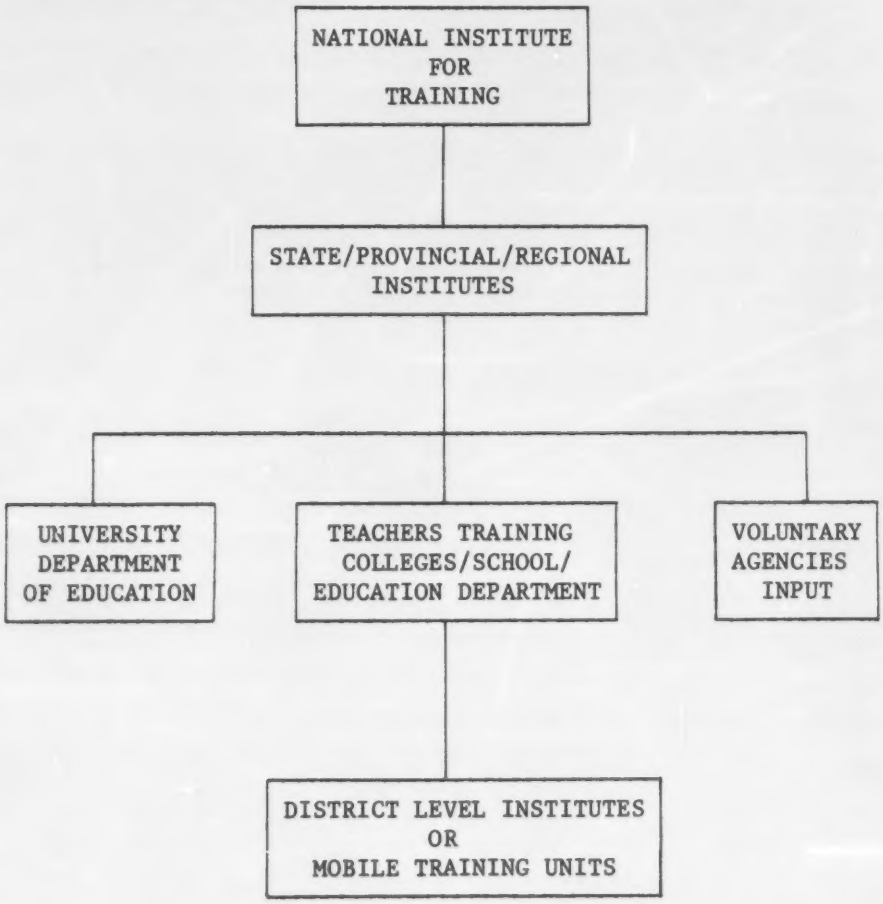
* For the concept and conduct of Advanced-Level Workshops, see APEID Continuing Education for Teacher Educators: Handbook of Suggestions for organizing Advanced-Level Workshops pp. 1-12.

Structure of Training Institutions

(A Suggestive Model)


NATIONAL INSTITUTE FOR TRAINING
STATE/PROVINCIAL/REGIONAL INSTITUTES
UNIVERSITY DEPARTMENT OF EDUCATION
TEACHERS TRAINING COLLEGES/SCHOOL/ EDUCATION DEPARTMENT
VOLUNTARY AGENCIES INPUT
DISTRICT LEVEL INSTITUTES OR MOBILE TRAINING UNITS

Components of training

1. Administrative components

It is a fact that in various countries the top level positions in educational administration are held by civil service personnel. Though at this stage it would be better to have a professional person to guide the administrative policies in education yet it would not be easy to change the pattern suddenly. At best it can be insisted that every civil servant in key administrative position, dealing with educational policy implementation and administration, should have proper orientation in professional practices. This orientation may include actual insight into innovative pedagogical trends and approaches together with experiences in live classroom teaching/learning situations through field trips and actual professional experience.

There is a controversy ranging in many parts of the world as to whether the generalist has to hold sway over the professionalist and vice versa. Whatever may be the arguments on both sides, it is imperative that whoever is dictating the policy, he must be professionally trained and prepared thoroughly for the job. The professionalist will need orientation in the rules of office business and administrative procedures, and the generalist will need the technical know-how of educational professionalism. Only an appropriate and selective training of proper mix will help to avoid fixing "square pegs in round holes".

2. Professional components

The preparation programme for the administrative and supervisory positions must be a functional one. Action must form the basis of such programmes and all unnecessary frills should be left out.

If professionals are placed to steer educational administration in relation to innovation, it will be a basic requirement of the job that they are provided the necessary competencies in administrative/management skills, official routines and procedures, R & D (research and development) requirements, planning procedures including perspective planning, orientation in new concepts, trends, techniques and methodology of education, together with an insight into the monitoring and control of the innovative process.

Of late the competence in financing and budgeting educational programmes is gaining importance and the administrator lacking such competence will not be able to do justice to his job. The component of training in financing, budgeting, auditing, fiscal policies, analysis of cost effectiveness of inputs, and finance control must also find an appropriate place in professional competency training. Training in public relations must also be given its due place if the innovation has to seek community sanctions.

Mode of training

The expanded scope of educative activity and the variety of levels of personnel involved require a scientific handling of the situation in relation to the orientation/training programmes. The planning for such training programmes requires quite a depth of perceptive insight, and a masterly skill in projections. Most of the innovative measures fail owing to the lack of these prerequisites. The 'modality' of the training programme and the method of orientation alone can give the real punch. It would therefore be worthwhile to start from a well defined and properly laid out identification of the objectives of such orientation so that the 'core' of the programme is not missed at any stage.

The training programme should be conveniently categorized for each group and the time schedule should be drawn up well in advance.

Pre-job training of the personnel, promoted or appointed is a MUST, since there is no point in leaving a person in a key position as a matter of chance. The competency component for pre-job training needs to be in conformity with the job specifications and requirements of the position. That is the only sure way of deriving the maximum out of the personnel potential.

This age is the age of cognitive explosion. Various studies have pointed out that in order to keep pace with the rapidly changing world around us, we have to observe and appreciate that:

a) every new day dawns with an additional phase of cognition and if education or the system has to survive as a living organic body, it will have to keep itself alive to new changing situations and

b) the man involved in the activity of innovation becomes depreciated professionally and competency-wise unless he is updated constantly.

Unless the new dimensions of cognition are kept pace with and such depreciations are replenished, the dwindling stock of competencies may not be able to cope with the requirements of the changing situations. A well designed and systematic scheme for the constant flow of know-how to the key-personnel is, therefore, a vital requirement of the system itself. There should be opportunities for both the administrator and the professional personnel for orientation at least once in five years. It would be easy and viable for the governments to plan a policy of training whereby 1/5th of its personnel in key positions are oriented every year. It amounts to updating the orientation. The scheme must be chalked out well before time and every person in key position must know well in advance the scope and area of competencies he would be oriented in. The working papers and general information data on the orientation programme can be sent to the prospective trainees so that they are sufficiently motivated. This

motivation is the only sure way to sail safe on the course of training, and no training programme can be visualized to have success without it.

The programme of the orientation/training should be so designed as to ensure the full participation of each trainee. It may necessitate the adoption of new teaching/learning techniques, use of multi-media, self-learning packages and other devices to keep the interest of the trainees alive and dynamic in action.

Keeping in view the magnitude of the task of orientation of all the key-personnel in education and the urgencies of the call of their routine jobs, it is recommended that the concept of contact-cum-distance learning may be introduced to reach each and every person, if it is not administratively or convenience-wise possible to bring all of them together to the training centres. It is further suggested that while planning the orientation programmes, the services of research scholars at universities and other institutions may be made use of, if their research is related to the innovation in sight. There may be voluntary bodies who have experts in the field. The training programme can attempt to mobilize all the expertise available elsewhere to make the training worthwhile and meaningful.

Feed-back and follow-up

Many of the attempts at innovation and the impact of the training/orientation in the changing situations fail to register the desired results owing to the absence of proper feedback from the field, and follow-up activities at the administrative level. Any training programme lacking constant monitoring and follow-up after a regular feedback amounts normally to a waste of public funds and makes the training ineffective.

A systematic mechanism should be evolved to provide the administrator/supervisor with a continuous flow of feedback information on the field situations in relation to the innovation. The key personnel should be given the competency of monitoring the process of innovation and following up the implementation.

This Technical Working Group seriously suggests the formation of Monitoring Cells at viable levels of administration/supervision to act as the clearing houses on the feedback information. This mechanism will help the administrator/supervisor keep track of the process and progress of innovation and to launch remedial measures or to take steps for strengthening the activity of innovation. It will also facilitate an overall review of the innovative programme from time to time.

Evaluation

Evaluation of the orientation programme is essential on two counts. Firstly, when public money is spent, there must be accountability for the performance. Secondly, evaluation helps to improve the programme in the years to come.

The first step in evaluation will be the evaluation of the training programme itself. Constant review and evaluation of the orientation programme should be ensured. The impact of the training for innovator would be assessed by the results of the innovative projects through the various feedback measures suggested above. In addition, the practice of involving Parent-Teachers Associations and School Development Societies in the evaluation mechanism along with professionals and administrators may also be tried. This has immense scope, since all the programmes are for the benefit of the public and the parents and teachers, and it would be excellent to get them involved.

The next step in evaluation is to train the administrator/supervisor in the techniques of evaluation so as to enable him to evaluate the path and progress of innovative programme under way.

It would be good if evaluation techniques are made a part of the teachers training programme itself so that the professional teacher may be capable of evaluating by himself, first the success or otherwise of his instructional plan in relation to innovation. Later, short courses in evaluation methods and techniques, and relevant handouts sorting out the guidelines may be issued, both for the professional and the administrator/supervisor.

For proper evaluation the goals and the scope of the innovative programmes should be made clear. Each administrator/supervisor should be supplied with a clear blue print of the innovative programme, so that it will be most useful not only for the implementation but also for the evaluation.

Innovation to increase productivity of educational process

In this rapidly changing world, change has become the order of the day. Innovation in education is an attempt at responding to the call of time and being alive to the situations around us. It is therefore imperative that the innovation must have clearly defined objectives. All the innovative attempts in the present day world are aimed at development and progress. "Innovation means a change in which invention, research, application of new techniques and modification of educational practices, related to increase the productivity of the educational process.... all play a part." (Learning to be - Unesco, Paris 1972)

Let us train a group of dedicated key personnel beginning from the highest level of the policy maker down to the last implementing link in the ever growing chain of innovation, so that educational productivity and effectiveness could increase, thus resulting in the all round development of nations in order that this world of ours may be made a better place to live in.

Annex I

AGENDA

1. Inaugural session

2. Election of officers of the Meeting and consideration of the agenda

3. Exploration of country experiences relating to alternative structures and approaches in bringing about changes in the teaching and learning

4. Review and analysis of country experiences related to preparation of heads/principals of schools and teacher training colleges and supervisors for the improvement of teaching and learning

5. Field visits to projects/centres

6. Guidelines in training of key personnel with reference to educational innovations

7. Consideration of the group reports

8. Consideration and adoption of the report

Annex II

LIST OF PARTICIPANTS

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LIST OF DOCUMENTS

Information Documents

ROEAO-80/APEID-TWG.AME1/INF.1 - General Information Paper

ROEAO-80/APEID-TWG.AME1/INF.2 - List of Participants

Working Documents

ROEAO-80/APEID-TWG.AME1/1 - Agenda

ROEAO-80/APEID-TWG.AME1/2 - Annotated Agenda

ROEAO-80/APEID-TWG.AME1/3 - Provisional Schedule of Work

ROEAO-80/APEID-TWG.AME1/4 - Report on Preparation of Key Personnel in Administrative and Supervisory Positions by Dr. Muhammad Abdul Mannan

ROEAO-80/APIED-TWG.AME1/5 - Towards Effective Support and Management of Educational Innovation by Dr. K. Venkatasubramanian

ROEAO-80/APEID-TWG.AME1/6 - Problems in the Preparation of Key Personnel in Administrative/Supervisory Positions for Support to Innovation in Teaching and Learning Process by Mr. Suharmono, IR.

ROEAO/80/APEID-TWG.AME1/7 - Report on Preparation of Key Personnel in Administrative and Supervisory Positions Responsible for Support to Innovations in Teaching and Learning Process by Mr. T. Yamagiwa

ROEAO/80/APEID-TWG-AME1/8 - Preparation of Key Personnel in Administrative and Supervisory Positions Responsible for Support to Innovations in Teaching and Learning Process by Dr. Mohamed Yaacob bin Haji Mat Nong

ROEAO-80/APEID-TWG.AME1/9 - Administrative and Supervisory Training for Support to Innovation in Teaching and Learning Process in Nepal by Dr. Birendra Kumar Mallik

ROEAO-80/APEID-TWG.AME1/10 - Preparation of Administrative and Supervisory Positions Responsible for Support to Innovation in Teaching and Learning in Pakistan by Mr. Mobarak Husain Shah

ROEAO-80/APEID-TWG.AME1/11 - Preparing Key Personnel and Administrative and Supervisory Positions for Support to Innovations in Teaching and Learning Process by Dr. Lourdes S. Sumagaysay

ROEAO-80/APEID-TWG-AME1/12 - Development Education, Educational Innovations and Preparation of Key Personnel in Education in Korea, by Dr. Chong Jae Lee

ROEAO-80/APEID-TWG.AME1/13 - Preparation of Key Personnel in Administrative and Supervisory Positions Responsible for Support to Innovation in Teaching and Learning Process in Sri Lanka by Mrs. Malini Wijenayake

ROEAO-80/APEID-TWG.AME1/14 - Towards Education for Life and Society: the Preparation of Key Personnel Responsible for Curricular Innovation in Thailand by Dr. Ekavidya Na Thalang

ROEAO-80/APEID-TWG.AME1/15 - Role of Administrators and Key Personnel in Support of Innovations in Science Teaching by Mr. Chin Pin Seng

Annex IV

VISITS TO INNOVATIVE CENTRES/PROJECTS

The participants of the Technical Working Group visited the following innovative centres/projects of the host country: (i) Korean Educational Development Institute, Seoul; (ii) The Institute for the Study of Educational Administration, Seoul National University, Seoul; (iii) The Demonstration Primary School attached to the Seoul Teachers College; and (iv) Sin-il Junior and Senior High School, Seoul.

During the visits, the participants held discussions with the staff of the institutions and had an opportunity to observe them in operation.

Korean Educational Development Institute

The delegates to the Technical Working Group Meeting on preparation of key personnel for innovations at Seoul would remember their visit to the Korean Educational Development Institute (KEDI). This eight year old Institute, established to seek essential solutions for educational problems facing Korea, is fast elevating itself to an institute of education of an international order.

The Institute, mainly charged with the responsibility of large scale research in educational issues, has progressed remarkably and it stands today as a model institute in curriculum development, which produces an impact.

Many an educational planner would agree that lack of emphasis on proper curriculum development has been the cause of diverse educational ills.

The Korean Educational Development Institute as an independent, autonomous and government funded educational research and development organization has been undertaking comprehensive and systematic studies on educational goals, contents and methodology.

It is also doing relevant studies related to educational policy and planning to solve the current issues in the field of education.

Major programmes of the KEDI include research and development activities relating to management of educational innovation, curricular and educational policies, production of TV and radio programmes. KEDI also spearheads innovative projects in textbook production.

The most useful project of KEDI has been its programmes connected with textbook and production of teachers guides for primary and secondary schools.

Another important area of activity wherein KEDI has made an impact is the field of educational policy research. The Educational Policy Research Department of KEDI undertakes various policy related research activities to support the development of educational policies relating to and relevant to social needs.

KEDI's educational radio and TV broadcasting project as well as their development of an information management system serves as an ideal base for research activity.

KEDI's emphasis on curriculum development based on fundamental research, research-based curriculum revision and the integrated curriculum approach, the translation of educational goals of the nation into school goals, institutional goals and their analysis into the teacher educators' training needs, both in the formal and non-formal spheres of education, makes KEDI stand out as one of the leading educational development institutes.

The Institute for the Study of Educational Administration, Seoul National University

This Institute for the Study of Educational Administration was established in 1961 for the purpose of enhancing leadership training for educational personnel. It has four functions, namely, leadership training, research, information exchange, and professional consultancy. As a national university, its programmes are handled by the university professors in answer to the needs of administrative and supervisory field personnel.

Leadership Training for Educational Administrators

This training programme is designed for administrative and supervisory personnel who have been promoted to the ranks of assistant principals or principals, and for high ranking supervisors, educational researchers and specialists. While they are selected through educational qualifications and experience, their merit ratings depend partly upon the results of their six-month or three-month training at the Institute. These personnel are trained for the purpose of licensing.

The programmes consist of general courses that are aimed at understanding broad areas like history, society and culture and their relevance to education, and required courses on philosophical and psychological foundations of education, social sciences, educational administration, research and the process of education. Elective courses consist of given areas revolving around problems of educational administration.

Lectures, descriptions and problem studies in the field are the methods adopted. A thesis is required, and for this the trainee has to work out with individual instructors.

There is close co-operation with KEDI and KIRBS in terms of work done by the Institute.

The future plan is to evaluate the programmes from time to time in order to determine what the Institute could do to fill up gaps in training. The need that has been identified is the training of general administrators who are working in education but have no professional background. These personnel have passed the high level civil service examination but have not been trained in education specifically. Thus the Institute is presently working on a programme for these highly placed general administrators, to provide proper orientation in professional education.

Attached Primary School, Seoul Teachers College

1. Purpose of visit

The participants visited the Demonstration Primary School attached to the Seoul Teachers College. The puspose of the visit was to appraise the participants of the new approaches and techniques adopted for the teaching and learning processes in Korean institutions.

2. The school

The participants were received by the Principal of the school, who briefed them on the facts and figures and educational activities of the school in a short speech, followed by observation of the actual classroom situations.

The school is a six grades' school (as other primary schools in Korea are), with the difference that it works also as a laboratory school for the Seoul Teachers College. A total number of 25 teachers teach 1,200 students in the school, the teacher student ratio being 1:48.

The school working day for grades 1-3 is four hours and for grades 4-6 six hours, which means that the children in the lower grades do not have to come in the afternoon (post lunch) time, which is a very good arrangement. The number of subjects taught in grades 1-3 is eight, and in grades 4-6, it is nine, the additional subject being the vocational areas with three choices, i.e. home economics, agriculture and commerce. The teachers are grade teachers with the exception of music and fine arts, where the teachers are subject teachers.

3. Vocational education

The school imparts instruction in vocational subjects from grades 4 to 6.

4. The teaching/learning situations

The atmosphere of the class: The classroom atmosphere was very conducive to teaching/learning process. The students were all properly

motivated, active, happy and responsive. They appeared to be really enjoying their work and this made all the difference to their motivation.

5. The review

It was a pleasant experience to go round the school and to see the happy, motivated children working with keen interest in a congenial atmosphere. The following aspects were of particular interest to the participants.

a) The Audio-visual Centre: The centre for the preparation of audio visual aids in the school is excellent. The children at this age are more keen on learning through sensory sources, such as audition and vision, in comparison with books only. Each classroom has the facility of a TV set, where, through the centrally organized system of local telecast, teaching is given support through the teaching aids. The group saw the working of a class on phonics/phonetics of the Korean language, and it was quite interesting.

b) Teaching of science: The participants were keen to see the teaching of science, and a period in the teaching of chemistry was witnessed.

Shin-il Junior and Senior High School

From the South of Seoul Primary School, the group went to see the Shin-il Junior and Senior High School in the North. The school is a private school and is equipped with all the requisite modern facilities. It has two sections, i.e. Junior High School and Senior High School. The 48 classes of the school have 3,000 students with 100 teachers, and the teacher/student ratio is 1:30.

In short, the Korean system of the education gives scope for free expression of the individual personality of the students. It is needless to emphasize that development of personality and the development of self-confidence are most important for student growth.

APEID PUBLICATIONS RELATED TO TEACHER EDUCATION

In-service training of teachers in Sri Lanka (IBE/ACEID series), 1976

Exploring new directions in teacher education: re-orienting teacher education for rural development (Teacher Education 2), 1977

Preparing teachers for education in rural development - a handbook, 1977

Continuing education for teacher educators - advanced-level workshops, 1978

Continuing education for teacher educators: handbook of suggestions for organizing advanced-level workshops, 1978

Developing instructional modules for teacher education: a handbook, 1978

Developing instructional modules for teacher education: selected exemplar modules, 1978

Continuing education for teacher educators: identified needs and plans for national workshops, 1979

Policy studies in Asia - the training of educational personnel: India, Nepal, Pakistan, Philippines, Thailand, 1979

Teacher education: directions of change, 1979

Universalizing education: selected innovative experiences - New techniques for preparing educational personnel, 1979

Universalizing education: strategies for development and use of instructional materials, 1979

Designing instructional materials for general education and teacher training: a portfolio of experiences in Asia and Oceania, 1980

New personnel profiles in relation to changes in society and educational systems, 1980

In-service teacher education: developing innovatory strategies and instructional materials; report, 1980

Preparing educational personnel: Training methodologies based on locally available learning resources, 1980

Social change and new profiles of educational personnel; national studies: India, Nepal, Philippines, Republic of Korea, 1981

The *Asian Programme of Educational Innovation for Development (APEID)*, initiated on the recommendation of the Third Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia (May–June 1971, Singapore) and the authorization of the General Conference of Unesco at its seventeenth session (Paris, 1972), aims at stimulating and encouraging educational innovations linked to the problems of national development in the Asian region.

All projects and activities within the framework of APEID are designed, developed and implemented co-operatively by the participating Member States through their national centres which have been associated by them for this purpose with APEID.

The 21 countries in Asia and the Pacific participating in APEID are: Afghanistan, Australia, Bangladesh, China, India, Indonesia, Iran, Japan, Lao People's Democratic Republic, Malaysia, Maldives, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Singapore, Socialist Republic of Viet Nam, Sri Lanka and Thailand. Each country has set up a National Development Group (NDG) to identify and support educational innovations for development within the country and facilitate exchanges between countries.

The Asian Centre of Educational Innovation for Development (ACEID), an integral part of the Unesco Regional Office for Education in Asia and the Pacific in Bangkok, co-ordinates the activities under APEID and assists the Associated Centres (AC) in carrying them out.

The aims of APEID are:

- to stimulate efforts of the Member States to improve the quality of life of the people through creating and strengthening national capabilities for the development and implementation of innovations in education, both formal and non-formal;
- to encourage the Member States to make all groups (students, teachers, parents, village and community leaders, administrative personnel and policy makers) aware of the need for relevant changes in education (both formal and non-formal) as an essential pre-requisite for the improvement of the quality of life of the people;
- to promote understanding and appreciation of the differences in educational practices and approaches of the Member States, and thereby contribute to international understanding and the creation of a new international economic order.